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ICL software fails second test

by John Kavanagh

ICL has been forced back to the drawing board for the second time to revise its Dilis package for controlling local authorities' direct labour organisations. The system has again been refused a seal of approval from the Chartered Institute of Public Finance and Accountancy – and ICL's local government customers are getting impatient at the company's failure to get Cipfa's "preferred supplier" tag.

ICL and CMC were proposed as preferred suppliers by Cipfa when legislation demanding closer control over direct labour organisations was introduced last year. Other suppliers bought the Cipfa system specification and went ahead with their own packages but without the chance of a seal of approval.

CMC's product passed the Cipfa test but at the end of last month ICL's Dilis failed again.

Failure to get Cipfa approval has not prevented ICL selling the system – it has about 80 orders and 40 users are already using or installing the product. But now they are urging the company to pump new effort into getting it right.

"At the end of the day this package has to work or there'll be all hell to pay," said Frank Baxendale, chairman of the Dilis user group and assistant treasurer at Lancashire County Council.

Baxendale said Dilis met the basic demands of the legislation but fell short of the minimum Cipfa specification. "The seal of approval depends not only on whether the system does the job but also on issues such as documentation, ease of use and how far the system can be audited," he said.

"There are reservations, in some case serious ones, about whether the system meets all these demands. There are certain usability problems in particular which are significant. Some authorities are having extreme difficulty."

One satisfied user is Newcastle-under-Lyme District Council. "I think it is fairly easy to use – but we took a different approach," said chief auditor John Emery. "Instead of picking bits out of the package we decided what we wanted to achieve and made the system achieve it. We specified a dozen or so extra programs and contracted ICL to write them into Dilis for us."

Cipfa is now waiting to hear ICL's plans. An ICL spokesman said: "We are meeting Cipfa very soon to discuss the reasons for the failure of the system to get approval. We will then provide a plan of action – we want that approval."

Other suppliers have complained about the "preferred supplier" tag. "Some of us feel we haven't done as well as we should," said a spokesman for ABS Computers, which has sold three direct labour organisation systems, including one to the Greater London Council.

"We had cases where we got to an advanced stage of negotiation with the building works department, only to be thrown out by the finance people because our system was not approved."

SCHUMANN and BLECHNER . . . Alive to more takeovers.

Star rises to full listing

by Ron Coates

SYSTEMS house Star will next week join the bare handful of UK computer firms which have attained a full listing on the Stock Exchange.

And the London-based company will be on the look-out for other companies to buy. Earlier this year Star took over the UK arm of Hartley, the Australian accounting systems house which went into receivership in its home country.

David Blechner and Jack Schumann, Star co-chairmen, have no immediate plans for takeovers. But Blechner said: "We have done our first acquisition and found that we quite liked it. We are alive to others.

"But the problem is, of course, to make the right acquisition. If you make the wrong one it takes up management time that you find you can ill-afford."

Blechner commented on the advantages of Stock Exchange listing. "We bought Hartley by selling 300,000 shares on the unlisted securities market. The only cost to us was £10,000 worth of dividends although we paid £770,000. You could say that we bought Hartley for 10 grand.

"We have served our apprenticeship on the unlisted market – it was excellent. I can't understand why more companies haven't joined it of late."

But he also said that he felt some companies in the US would come to grief. "There will be the odd disaster and we want to distance ourselves."

It cost Star £67,000 to get a listing on the USM. This was made up of banker's, lawyers' and accountants' fees and the cost of producing a brochure.

Star last year made a profit of £822,000 on a turnover of £4m.

NMW finally goes on to the market

NANTWICH, Cheshire-based Bureau NMW has cleared all legal hurdles and will make its long-delayed listing on the unlisted Securities Market on November 15.

The bureau, set up in 1970, accounts for one-third of all exchange transactions processed through stockbrokers offices and recently revealed mid-year profits of £305,529 on turnover of £1 million.

Support for Alvey

SIX leading UK software houses have strongly backed the Alvey report on future UK computer research. Logica, Parel, Systime, SDL, SPL and SSL all hope for early go-ahead from the government. They say it is vital that technologies covered by the report are developed so that UK industry can more profitably attack world markets. See story page 7.

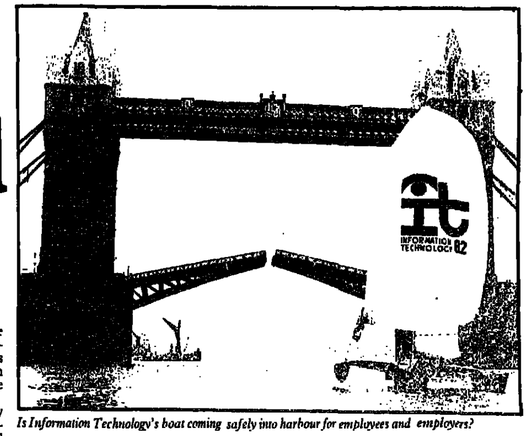
Knight profits

RECRUITMENT firm Knight Computer International has reported half-year figures to July 1981. Turnover was almost £1 million and pre-tax profits £215,000 put the company on the way to predicted year-end sales of £450,000. A sixth US office opened in September – four months ahead of schedule.

'New standard'

A DATABASE package that can soon become the standard for CP/M micros" has been announced by London software house Microcomputer Facilities Systems. Marketing director Richard Stemler claims the Rescue package compares favourably with its rivals. It is a collaboration of three Cambridge graduates.

Slump has not dimmed demand for skilled staff



Is Information Technology's boat coming safely into harbour for employees and employers?

THE latest salary surveys show that the recession is beginning to bite into the computer industry. Since the beginning of the year, the rate of salary increases for computer staff has been slowing down.

But earnings for specialist staff have continued to rise, which should surprise nobody.

And a full Compec recruitment supplement, an exhibition where 400 companies will be exhibiting and which some 40,000 are expected to visit – these would all seem to be signs of a healthy and buoyant industry.

Or are they?

An abundance of job ads will be seen by some as a reflection of the same old problem which has always dogged at the computer industry – staff shortages. Shortages of skilled staff, that is, because there has never been a shortage of trainees.

This special supplement to the regular issue of Computer Weekly looks at a number of issues of importance to employees and employers. It is published in advance of Compec, our major exhibition, which will be held at Olympia in London from November 16-19.

With Compec, the major showcase for serious information technology, coming around once again, what is new? One thing in particular has been at the forefront of the news this year – the government's Information Technology campaign, which draws to a close at the end of this year.

IT82's detractors will argue that the campaign has had little or no demonstrable effect. The response of its sponsors will be that the effects will become evident in years to come. What IT82 did provide was a face, that of Kenneth Baker MP, Minister for Information Technology.

Baker put a human face on an otherwise faceless government initiative. It is Baker who will carry the can for the success or otherwise of IT82.

Information Technology Year is an expensive publicity exercise, an "awareness" programme, which the government hopes will get people geared up to living and working with technology, in time to take advantage of their new skills for an economic recovery – the light which the government is convinced it can see at the end of the tunnel.

But the situation we now have, according to one view put forward in this supplement, is beyond the means of parliamentary whizz-kids and faceless civil servants. The hard core effect of technological revolution is upon us now, and the growth we enjoy is at the cost of the unemployed.

Employment prospects for Tops graduates still look poor, though according to another view, between 50% and 60% have found jobs. Employers who have taken on Tops graduates are invariably satisfied with them. The remainder have been trained at the taxpayers' expense to join the dole queues or to take employment in another field altogether.

At the same time, there are an estimated 24,000 vacancies on the job market in computers. The computing services industry is one of the most rapidly growing sectors of the UK economy, but in recent years there has been no significant increase in employment there, though average turnover is increasing at 14% a year.

Consultancies, software houses and turnkey suppliers offer the best prospects while bureaux, which constitute the largest market sector, are reducing staff, particularly in data preparation services or similar labour-intensive work.

Staff shortages on the one hand, and unemployment on the other, reflect a crisis in training, a combined lack of formal education and experience. The British Computer Society is aware of the crisis, and fears that the problem will get worse before it gets better, especially when the recession ends and demand for computer staff increases again.

The recruitment picture varies widely between the different types of jobs.

For many companies, it is time to batten down the hatches rather than undertake expansion programmes.

This special supplement on recruitment is one of two issues this week, the other being our regular issue plus a special Compec Preview. Compec will be held at London's Olympia next week from November 16-19. Opening hours are 10.00-1800, with a 16.30 early closing on the last day.

IDPM group aims to help end users

by John Kavanagh

USERS from all disciplines are being offered a new forum by the Institute of Data Processing Management to pool their computing experiences and discuss problems.

The aim is to help everyone from engineers to accountants to avoid pitfalls often met by users with no computing knowledge and to get the most out of their systems – with advice from the IDPM's professional members.

"Micro users in particular are often in very serious trouble," said Ted Cluff, IDPM secretary-general. "They start with simple single-user machines but grow to multiple files and multi-user systems and get up to their necks in computing. They don't understand the need for simple things like file back-up, things which are second nature to computer people.

"We at the IDPM feel we have an obligation to help end users. We don't want to make them computing professionals – we want to help them do their jobs better through computing.

"I feel that if we can raise the level of end user computing competence, we are helping the UK generally."

The new group will be administered from the IDPM office and will have close contact at branch level, with joint meetings being held with the IDPM's data processing manager members.

There will be no entrance requirements. Normally IDPM members have to pass the institute's examinations or have 12 years' experience. But Cluff said the group might decide later that some sort of entrance qualifications were needed.

He was confident users would flock to join.

CLUFF . . . Pooling experience.

Directors' prize goes to Racal

by Kevin Cahill

ELECTRONICS group Racal won major recognition for its leading position in the UK electronics industry when the Institute of Directors awarded the company the Business Enterprise Award last week.

The prize, awarded annually, is the most prestigious commercial accolade after the Queen's Award to Industry and chairman Sir Ernest Harrison said that it was a tribute to a team of 19,000 people. The trophy will be widely displayed throughout Racal, starting in the works canteens, according to Sir Ernest.

The award is sponsored by the Institute of Directors, Barclays Bank and the Sunday Telegraph among others. The presentation lunch is a charity affair which this year raised nearly £10,000 for the Royal Society for Mentally Handicapped Children, another of the sponsors.

Racal was singled out from a shortlist which included Clive Sinclair's company Sinclair Research. It is the first electronics company to be given the award.

600 jobs for Limerick

by Tom MacSweeney

NEW European manufacturing headquarters for Atari of California is to be in Limerick, Ireland, which Atari plans to use as the springboard for an attack on the $730 million television video games market in Europe.

Atari first set up in Ireland four years ago at Tipperary, where it now has two factories. It has promised 600 jobs by 1983 to the Industrial Development Authority *which attracted Atari to Ireland.*

Chief executive and chairman Raymond Kassar said in Limerick that Ireland was a "terrific springboard" for the Common Market.

LINE NOISE

APPLES certainly have appeal: Apple Computer is increasing its workforce from 3,500 to 4,900 in the financial year just started. Many of these people will be working on a new business computer, code-named Lisa and for several months the subject of industry speculation.

A STANDARD version of Mumps, the interactive language and operating system, is to be offered for IBM Series 1 users next year. US company Computer Technology Inc, of Germantown Tennesee, will come out with a version compatible with the soon-to-be-offical 1982 ANSI standard Mumps, which is virtually the DEC standard version already available on PDP-11s.

HARD times continue at Storage Technology, it seems. After 400 layoffs in the US there is talk of more jobs going at factories in the Republic of Ireland and Puerto Rico. And employees will treat with misgivings a Christmas present of an extra week off as the firm extends its Yuletide shut-down from one week to two.

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Kenneth Baker is the public face of the government's information technology awareness campaign, IT82. Judith Norris poses some questions. Page 2

DP careers
Ted Cluff looks at the computer industry's employment prospects for the 80s, and its impact on managers. Page 3

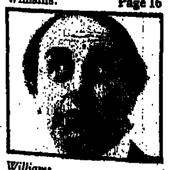
DP training
Far from being a backward service enterprise, DP training has become a field of controversy, reports Ian Simpson. Page 20

Services
Although the computing services industry is one of the fastest growing sectors in the UK, there is a vacancy at the right level and right salary are close to zero. Page 6

Salary Surveys
The rate of salary increases has been slowing down in the computer industry, but earnings for specialist staff continue to rise. John Aczel analyses the figures. Page 8

Employment
The future of the computer trade will reflect the economy rather than act as a stimulant or a depressant, Paul Fisher comments. Page 10

Banking
Few people have the necessary technical skills and business expertise required for banking DP, says Emlyn Williams. Page 16



Williams

Sales
The supply of salesmen in the 25-35 age bracket with a track record of sales [illegible] are now working at 20% below [illegible] Many [illegible] by a healthy [illegible]

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Programmers
Technical specialists are in demand from all sides of the market, and have the best choice of jobs. Page 28

Analysts
It is uncommon for employers to ask for qualifications from would-be analysts. They are more interested in experience, says Margaret Park. Page 30

Top Jobs
Company user management may relish the idea of gaining processing independence, but it is essential that one individual be responsible for this, says Alan Simpson. Page 34

Midlands
There are signs that the job market in the Midlands is beginning to stir, according to DP recruitment specialists there. Page 38

West Country
Bristol and the West Country has enjoyed a good deal of success in attracting high technology. Page 40

Ireland
There are now about 150 companies in Ireland involved in software production, says Della Bradshaw. Page 42

Overseas
An increasing number of DP professionals have been going abroad to seek their fortunes in 1982. Page 48

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INFORMATION TECHNOLOGY YEAR

A year of schemes and dreams for the government's IT-man

Judith Morris measures Baker's success in his mission to bring IT to the people

THE most photographed face of IT Year must surely belong to Kenneth Baker MP, Minister for Information Technology. With a public presence rivalled only by the Princess of Wales, we have seen Baker cutting ceremonial ribbons, patting the heads of schoolchildren, peering intently over the shoulders of students and even, on one *memorable occasion, cuddling* a dog.

But the baby-kissing image, which has provoked some critics to dismiss IT Year as a massive and expensive PR exercise, is all part and parcel of Baker's mission to bring the message of information technology to the people.

For he is also the man who has adopted such emotive slogans as "automate or liquidate" and he has trekked the length and breadth of the country preaching the importance and urgency of harnessing the new technology and rescuing the world, and the UK, from decline.

Baker's appointment as Minister for Information Technology came in the grand government reshuffle of January 1981. It was a new post, including for the first time responsibility for all aspects of the computer industry. Baker was described at the time as a Heathite, a firm believer in government intervention in industry, and described himself as a "super salesman", whose job it was to spread the word of UK expertise wherever he went.

This year, the government is spending about £130 million on schemes which, in Baker's words, will "encourage the use and manufacture of IT products in the UK, and the training of a UK workforce able to exploit all the possibilities that technological advance will bring with it."

Baker has many major initiatives to his credit. The micros in schools project, for example, for which £4 million of Department of Industry money went towards putting a microcomputer in every secondary school is now extended to include 27,000 primary schools. Although Baker himself has said "Within five years I would like to see a computer in every child's satchel".

> **"His vision of the future does not, thankfully, include the emergence of an intellectual elite composed of computer boffins who will push the rest of us around"**

Training and education plays a great part in Baker's plan for an information society. However, he claims that "Information technology is not just for the gifted" and his vision of the future does not, thankfully, include the emergence of an intellectual elite composed of computer boffins who will push the rest of us around.

This argument is politically sound, too, at a time when the government is faced with growing unemployment figures, and the much-publicised scheme for 100 information technology centres to train unemployed teenagers has come in for its fair share of criticism.

Cynics say that the scheme is a Tory party political device to get kids off the streets and off the dole, where they will return after a year with nothing but the kind of basic skills the industry does not really need. Baker defends the £9 million scheme by saying that it is giving them the chance to "learn a skill and find a job in our increasingly complex society."

Another of Baker's major achievements has proved to be no less controversial. The liberalisation of British Telecom, announced well over a year ago, is facing criticism from those who say it is not happening quickly enough, and others, mainly trade unions, who say that it should never happen at all.

Nevertheless, the fact that the British Telecommunications Act – which broke BT's monopoly – should be passed at all, is no mean achievement, even if it is now becoming clear that there are unforeseen difficulties in bringing together the state corporation and private industry.

Complaints from industry that BT was setting up another closed ring of preferred suppliers have been joined by a massive trade union drive against the privatisation of BT which was demonstrated in a one-day strike by 180,000 BT employees last month.

But the Bill, which may become law next July, will still be Baker's baby, and in his own words "the most important we shall pass in this Parliament."

Against this backcloth of unrest, Baker has relentlessly pursued his policy of advocating IT enthusiasm wherever he goes. One of his main duties has been to dispel anxiety about the social and political effects of the micro revolution, which has led to many dramatic speeches, many of them defending his ambitious robotics plan.

Robots count among Baker's favourite things. His personal conviction of their place in society lies behind the Industrial Robots scheme, where companies can receive grants of up to 33⅓% of the total set-up costs for introducing robots on to their shop floors.

"The introduction of robotic systems is likely to lead to some loss of jobs in the manufacturing process," admits Baker "But the analysis must not stop there. Extra jobs will flow as a result of the improved efficiency of the company. The company should be able to take advantage of the greater productivity by producing more goods at a lower price, developing new products, finding new markets, seeking out new applications for its products."

For all his enthusiasm, Baker is a realist at heart. He knows perfectly well that the UK will never be a driving force in the information technology industry. "Part of my job," he says "is to make sure that Britain's inventiveness does not run into the sands again." We must be selective, he told the Tory Party Conference in Brighton last month.

He added that next year the government plans to spend £173 million on support for science and technology, a figure which falls significantly short of the £350 million scheme envisaged by the recently published Alvey report.

Although still being discussed, the government is unlikely to accept that this sort of money should come out of the public purse. Ken Baker could be biting his nails right now as he awaits Mrs Thatcher's decision on the report.

Ironically, the Alvey report came up with some of the strongest criticisms of Baker's policies to d[ate] including an attack o[n] loved micros in [the] scheme, which i[s] "producing a gener[ation] poor Basic programm[ers]".

However, director [of] information produc[ts] report should be w[el]comed by Baker and his [staff]. "Politicians are wo[rse] information," he told [the] this year "If they [are] prived of it they exp[erience] the most distress[ing] drawal symptoms".

As Information Technology Year draws close, it will be interesting to see how Ken Baker man at the Alvino[r] with withdrawing [support] from the public eye.

What will become[?] we wonder?

BAKER . . . For all his enthusiasm, a realist at heart

PROSPECTS IN THE '80s

Many companies have 'frozen' the filling of computer vacancies, says Ted Cluff

'No one will come into DP without some qualification'

CLUFF . . . Major issue is the future of the UK as a trading nation.

TO look at the job advertisements in Computer Weekly, one could easily believe that nothing had changed in the past five years and that prospects in data processing were as buoyant as ever.

It was then commonplace to talk in terms of 24,000 vacancies in DP. But it would be a brave person indeed who applied the same figure to 1982 in spite of the fact that the industry has expanded significantly since 1977/78.

Taking expansion figures of both 15% and 25% per annum in connection with extrapolations over the remainder of the '80s, it would not seem unreasonable to assume something between the two during the last five years in spite of recessionary pressures.

Although probably not strictly related, professional membership of the IDPM has expanded by 79% over the last 3½ years.

Looked at from another angle, the employment position in DP since the recession started – and it didn't reach its present serious proportions all at once, it was an accelerating process – has looked positively gloomy.

Evidence of this is the number of IDPM members who have become redundant, often by virtue of their companies just ceasing to trade. A few have actually felt the stigma of redundancy for a second time, but this is more the product of statistical chance than their own shortcomings.

It is what has happened to those who have lost their jobs which is important. Of those who come to one's attention, all have obtained a new position. Some have found a job quickly but others have taken several months to find something suitable.

"Suitable" might be too strong a word because as the weeks slip by, a number have been willing to take a position which they might have turned down in better times. But accustomed standards of living are a powerful incentive.

> **"Over and over again, one hears glowing reports from employers about Tops people"**

Not surprisingly, the older the person, the more difficult it is to find a new position. One member of the IDPM at 58, a data processing manager, viewed his prospect with alarm when his company was forced to stop trading.

Geographical situation has an impact not normally taken into account. A good job at an installation in pastoral surroundings, accepted a few years ago seemed great. Ten minutes by car from home, a more leisurely way of life, no rat race, splendid for the family, a large vegetable patch and what more can one want?

The company closes and there are only two other installations within 25 miles. Statistically, the chances of a vacancy, at the right level and right salary are close to zero.

Looked at from the view of the Tops graduate, the employment prospects in data processing right now seem poor. This is because of the number of Tops people who fail to get a position but do get publicity.

Yet something between 50% and 60% have been obtaining positions without too much trouble. Over and over again, one hears glowing reports from employers about their satisfaction with Tops people. Quite unequivocally, I have to state that so far, I have not had a single poor report.

Nevertheless, it is far from satisfactory if something like 40% of those trained with taxpayers' money cannot find a job in DP because of the usual demand for experienced people.

Let us all be very clear about the consequences. Although we know (or shall we say hope) that the recession will decline one day, if a switch were thrown to lift its effects within very short period, our industry would be so short of those with two years' experience that it would make the previous occasion of this kind seem an irrelevance.

An industry growing at 15% to 25% per annum in difficult times and not at same time providing job opportunities for the already inadequate numbers being trained, must expect, and will suffer from, major market distortions when the day of reckoning arrives.

So, are there really 24,000 vacancies out there still?

Of course, it is difficult to say with certainty but there are a large number of companies which have "frozen" the filling of any vacancies in the DP department. For the sake of their economic well-being as much as it may be, they are prepared to suffer the consequences of squeezing DP below its normally inadequate establishment.

But there comes a time when a case has to be argued that if a specific vacancy is not filled, the DP department could become quite impotent. It follows that the true position is concealed.

Having said that, it is clear that there is no lack of people willing to come forward and be trained for work in data processing. The BEC/TEC classes up and down the country are well supported; so are the the ONC/OND classes. The take-up for Threshold and Tops places continues to be vigorous.

This is to say nothing of the IDPM student growth which has been well over 300% since March 1979. The number of IDPM students sitting our examinations in December will also be a record.

What this means is that we are virtually at the stage where no one will enter DP without some qualification, as distinct from the days when many of us entered by accident or (bad) luck.

One interesting consequence of the economic situation has had a marked effect on DP employment. We have customarily talked in terms of a permanent 10% shortage below establishment coupled with a 25% annual turnover. Many are now working at 20% below establishments permanently reduced. But the turnover has dropped.

Of course, a lack of leavers means no need for replacements, which disguises the job market prospects when compared to 1978.

So what are the prospects for the future? There are a number of interacting forces, with the final outcome depending to a large extent on the product mix.

The major issue is the future of our country as a trading nation. We already know the impact of imports from the US and Japan. Unless companies in the UK improve their productivity by massive injections of computer-based office automation equipment, there will be a gradual decline to cottage industries, one of which will be software written from home (and no offence here to F International which can hardly be described as a cottage industry, with over 700 home-based staff).

> **"There may be a gradual decline to cottage industries."**

If on the other hand we manage to face up to and remedy our known deficiencies, one can envisage three main developments, the embryos for all of which are with us today.

The first concerns the prognostications of those commentators who forecast the end of the application programmer. This is often taken to mean the end of programming as we know it, with the implication that programming is a dead end.

Conversely, there is a view that simply because we are unable to significantly increase programmer productivity, the alternative uncontrolled growth in programmer population is a price no nation can afford.

The number of programmers employed will continue to grow but they will be distributed differently from present practice. One can virtually envisage an end to in-house programming in the small and medium-to-small installations, with replacement by package programs and software houses. The larger installations will suffer some decline in in-house application programmer resources for similar reasons.

The born programmers – those who prefer "bit-twiddling" above everything else – will drift inexorably to the software houses and the larger installations which will continue to be faced with complex problems, particularly those involving telecommunications.

The second development concerns the users who, whether we like it or not, will become more and more involved in doing their own thing. James Martin believes that by the end of the decade, they will produce 50% of their needs without professional help.

What about the other 50%? The needs of some will be met by application packages and software houses, but most will be met by a healthy interaction between users and DP professionals working together in a quite different way.

Trafford Borough Council is already working this way with software tools such as Ramis II for fast development of prototype files for the user to test out requirements. The user also takes responsibility for much of the input and output programs which the DP professionals fit into the final package.

This calls both for a high degree of professionalism from the DP staff and a very flexible attitude of mind. Since the growing need for improvements in productivity and faster development times are achievable this way, there can be no doubt that this will have a major impact on the way we work in future, even though not everyone in DP today is capable of operating in such an environment.

Finally, people working in data processing today have a great responsibility which many of them are unwilling to face up to. This concerns the need to play a major role in office automation procedures.

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Ted Cluff is secretary-general of the Institute of Data Processing Management.

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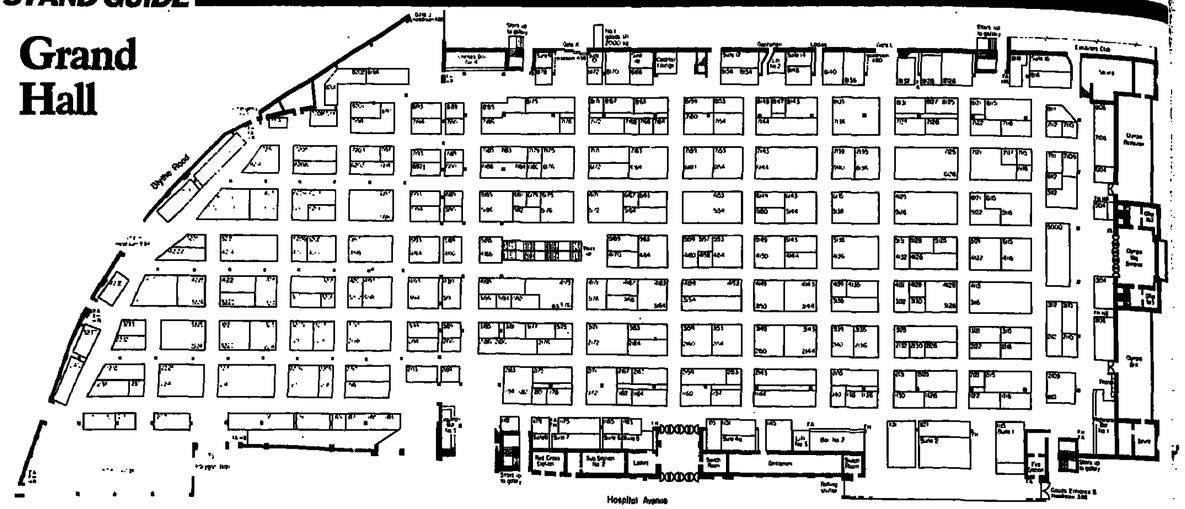

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TRAINING

'UK training has reached a crisis'

by Ernest Morris

A REPORT of the 1982 conference of the UK Consultative Committee on Education and Training in Computing highlighted "the crisis in the training and supply of computer skilled manpower in the UK, which for an industry that is increasing in scope at an exceptionally rapid rate is both substantial and urgent".

In May 1980 the Manpower Sub-Committee of the *Electronic Computers Sector Working Party of the National Economic Development Office* published a report entitled "Computing Manpower in the '80s" which concluded that "the overwhelming constraint on the adoption of computer technology is a massive initial shortage of computer skilled manpower, before which all other potential constraints pale into insignificance."

Based on surveys carried out in 1978-79 and on forecasts to 1985, the minimum demand for programmers estimated in that report was for 500 more programmers a month for five years. No doubt the general business recession in the UK and elsewhere has tempered this growth, but still the problem is recognised as acute.

And yet, trainees have difficulty securing programming jobs. Students and exstudents have tried repeatedly and unsuccessfully to enter the commercial data processing field. As manager of a large DP department, I am conscious of the substantial numbers of applicants for any position that we advertise, many of whom are trainees.

So how can there be a shortage? The problem, of course, is in the words "skilled manpower". It is a matter of subjective judgment whether an analyst or programmer has the right skill to meet the needs of a particular organisation. What is clear, however, is that many of the advertisements for computing staff emphasise that experience of a few years is needed, and this obviously excludes the trainee.

So there are problems for both the supply and demand sides of the market, for the employer and the potential employee. These problems are unlikely to go away in the next year or two. They are likely to get worse with any renewal of investment in computer systems development – the experience of the '70s shows that after a recession, renewed demands for computer-based systems are for development leadtimes that can only be met by buying existing packages or using experienced staff.

While that would be good news for the computer service industry, it would not solve the problem of the small-company user who can neither pay the necessary fees to outside organisations nor train his own staff fast enough, hence a problem in training as well as in recruitment.

The key word is structure. By this I mean a combination of academic qualification, professional qualification, knowledge of methodology and technology as needed for particular business requirements, and knowledge of individual and team capabilities which comes from experience.

There are many opportunities to learn techniques and methods, provided by academic and commercial organisations. Admittedly, there are complaints (from the BCS, for example) about the inadequate government funding for the former. There are also doubts about the relevance of some academic courses to the business world.

As a result, there seems to be scope for examining the nature of full-time training courses which cover a year or more. Nevertheless, there is a good base of technical education and a wide range of courses covering particular aspects of computing.

There is scope for improving the way in which computer-using companies blend together the particular attributes of individual staff educated in only part of the spectrum of computing knowledge.

The British Computer Society is putting a major emphasis on providing a structure for the professional development of computing staff, especially those in employment as DP analysts and programmers.

A professional development programme will identify:

- The skills and levels of knowledge needed for the usual job titles in data processing (programmers, analysts, etc).
- Career paths that DP staff can take to enhance their ability as DP specialists and their careers – within and beyond DP
- Appropriate types of work experience to develop skills and levels of knowledge in a satisfactorily supervised manner
- Standards of achievement that mark the attainment of professional competence – directly linked with professional membership of the BCS.

Naturally, the whole profession of computing would benefit, and so too would the user community generally, both by better quality work and better service in responding to demands. As a result, it is hoped that the crisis in skilled manpower availability will be reduced, and that trainees will find it easier to start a full-time career in data processing.

Morris is vice-president (professional) of the British Computer Society.

MORRIS . . . Trainees have difficulty securing programming jobs, despite manpower shortage.

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Further details and an application form can be obtained from: The Principal, Worcester Technical College, Deansway, upon receipt of a stamped-addressed envelope. (1817)

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DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTING

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Applicants for the above post should possess a good honours degree, together with appropriate industrial, commercial and/or research experience.

The successful candidate will be required to teach to honours degree level on the new Computing and Information degree course, and should be able to offer specialist knowledge in applications of Information technology such as distributed processing, database systems, management information systems and/or business applications.

Application forms to be returned by Friday, 3rd December, 1982, can be obtained with further particulars from the Personnel Officer, Plymouth Polytechnic, Drake Circle, Plymouth PL4 8AA. (1811)

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COMPUTING SERVICES

The services industry is expanding, but employment in the sector has not increased . . . . . Douglas Eyeions reports

A versatile job-hunter should go where the growth is — sales

THE computing services industry has been one of the most rapidly growing sectors of the UK economy in recent years. But it comes as a shock to realise that there has been no significant increase in employment in computing services during the last year.

After growing at about 8% per annum throughout the 1970s, the number of people employed in computing services companies has shown no overall growth in the 1980s.

The annual survey carried out among the Computing Services Association's (CSA) member companies, published in September this year showed that there had been a total growth of about 1½% in staff numbers, to bring the total number of staff employed by the 183 member companies to 26,800.

One and a half per cent is not statistically significant because of the wide scatter among the respondent companies. In a separate survey of the top 20 employers in the UK computing services industry, only five companies reported a significant increase in staff during 1981, with nine reporting a very significant decrease in the total number of staff employed.

The employment situation is patchy. The general pattern that emerges is that the percentage increase in staff is negligible for large companies, but becomes an appreciable percentage for the small companies which are continuing to grow in spite of the recession.

The total revenues of the companies are increasing at an average rate of over 14% per annum, which is keeping ahead of inflation so that there is some real growth in productivity.

Computing service companies are shedding surplus staff whenever the opportunity arises, to improve the competitiveness and profitability during the period of economic recession. One company reported a 30% increase in revenue for a 14% increase in staff during the last year, while another reported over 20% growth in revenue for a decrease in staff of 10%.

The companies which are doing well and offer the best prospects of employment are the consultancies, software houses, systems houses and turnkey suppliers. The main reductions in staff are being experienced by the bureaux which constitute the largest sector of the market.

Many of the large bureaux have had substantial redundancies during the last year and many others have reduced numbers by "natural wastage" or by transferring staff into non-bureau activities.

There are several reasons for this reduction in the employment opportunities offered by service bureaux.

The most obvious problem during the recession has been the fall-off in the number of transactions being processed by the bureaux. This is no different from the problems being experienced by airlines or hotels and represents a lowering in general economic activity.

If there are more unemployed people, then there are fewer payrolls to process. If people are buying less, then there will be fewer invoices to process.

The next reason why bureaux are employing fewer operational staff arises from the changes that are taking place from the old batch processing days. Women who worked in data preparation were the first to experience this reduction in employment. The number of women employed in the bureaux dropped from 30% of all computing services staff in 1971, to 8.8% in 1981.

Data control staff and computer operators, who grew considerably in number in the mid-70s, are now beginning to decline. More and more responsibility is being handed back to the customers so that the bureaux are sharing the labour-intensive activities.

Remote batch entry, interactive and time sharing services all require fewer data preparation staff, operators and data control staff. Intelligent terminals now allow a great deal of editing to be done on input data so that fewer human beings are required at the central processor to handle the increasing amount of work which is being processed on a routine basis.

EYEIONS . . . No jobs increase.

A further fall in the manpower requirements of bureaux arises from the need for fewer staff to operate modern computers.

The computer rooms of our more modern bureaux are being deserted by human beings. Input and output operations are increasingly being handled by the customers on a remote basis so that paper handling requirements, which are labour intensive, are being handled much less by commercial bureaux.

This trend is now spreading to disc handling and tape handling. Magnetic tapes are being used less frequently in favour of discs of mass storage devices. Disc loading is being reduced as fixed discs grow in popularity, and so the need for operators is beginning to fall off.

A major cause of the drop in demand for bureau staff arises from the move of customers away from bureaux to standalone minicomputers and microcomputers. Bureau proprietors recognise this trend and are increasingly involved in the installation of hardware on their customers premises so that they are diversifying into new businesses.

But this does not alter the drop in loading of the bureau computers and this trend has accounted for the shedding of many bureau staff during the past difficult year.

Prospects for programmers are much brighter, but even here actual employment has levelled out rather than increased. There is undoubtedly an increase in demand for software for all sizes of computer. But the move to software products and application packages is reducing the proportion of custom-built programming carried out by the computing services companies.

The increase in demand for software is largely being met by the sale of software products and, of course, the labour requirement to write a software package which sells many hundreds of copies is not all that much greater than the programming effort required to write one custom-built solution for the same application.

It is therefore not surprising that the number of people involved in selling in this sector of the services industry is growing significantly in spite of the recession. Salespeople accounted for only 4% of computing services personnel in 1973 — this percentage had more than doubled in 1981. In absolute figures, the growth is even more impressive.

The number of salespeople has trebled during the last decade to well over 2,000 at present. With the move towards application packages and turnkey solutions, the requirement for salespeople will continue to grow. The best advice to a versatile person seeking employment in the computing services business is go into sales, because this is where the prospects of employment are best, and incidentally, where success is probably most generously rewarded.

There is still a demand for good people in most categories of employment at many computing services companies at present — for a look at the number of advertisements in the computer Press. However, there is no shortage of under qualified people as there used to be in the late 70s, when a large advertisement for a system analyst or programmer would often receive no replies at all.

Now, most computer services companies tell you that they have unfilled vacancies for good salespersons, or good project managers or experienced systems programmers, telecommunications experts.

But good people in this category are not changing jobs lightly, and the service companies are not going to employ inadequately trained people at a time when the profit margins are difficult to maintain because of the economic recession.

Sadly, the computing service companies have exceptions to their customers which means they prefer experienced staff to train staff if they are available. Therefore, the computer service companies have reduced the intake of trainees in common with most other employers in the computer industry.

There is going to be a scarcity of staff with a couple of years' experience if the recession lifts next year, and the growth of the computing services business may be once again restricted by the availability of trained and experienced staff.

● *Doug Eyeions is director general of the CSA.*

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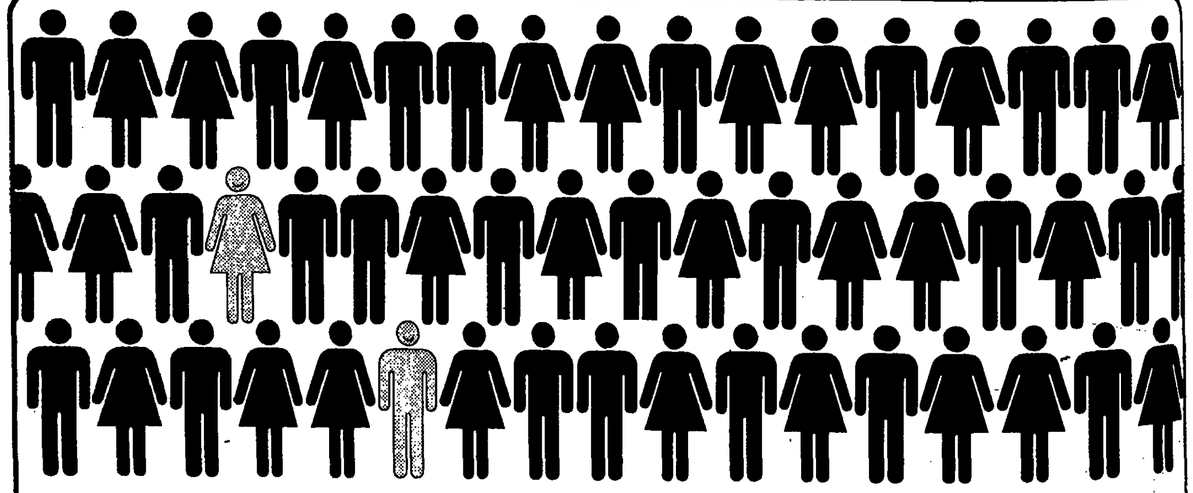

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SALARY SURVEYS

Pay rises in computing look promising for the coming year

John Aczel examines wage trends in the past year and makes some predictions

THE overall rise in salaries has been slowing down in the computer sector, and this trend has been evident since the beginning of the year. Earnings for specialist staff, however, have continued to rise appreciably, as there is still a shortage of certain grades of highly skilled personnel with the right type of experience.

These conclusions can be derived from the latest survey carried out by the Computer User's Year Book. The investigation is conducted every year, and is based on an analysis of the salaries received by over 22,000 personnel employed in the computer industry. Nearly 1,300 computer installations were included in this survey, which usually carries considerable weight within the computer industry, particularly for salary negotiations.

The breakdowns given in the Computer User's Year Book's investigation are detailed, and show salaries analysed by various job categories, such as data processing manager, chief system analyst, programmer and other job titles. In addition, the figures are broken down by other categories, such as regions and location.

According to this survey, salaries of data processing personnel went up by an average of 7.7% in the twelve months ending in April 1982. This growth was considerably less than in previous years, when salaries rose by 15.4% in 1981, and by over 21% in 1980. Evidently, there were considerable variations among computer grades, ranging from less than four per cent to over 14%, depending on job title.

Highly skilled personnel with specialist knowledge were in great demand, and their salaries recorded an above average increase during this period. In particular, systems programmers had a rise of 11.7% in earnings, while senior programmers had a growth in salary of 10.8%.

> **"Those in the higher salary brackets, that is £18,000 or over, stand a very good chance of having a company car, as over 70% had this facility in 1982"**

In contrast, salaries of trainees went up by less than 5.5%, while a similar trend could also be seen for certain types of computer operators.

The growth in salaries in the computer sector has compared favourably with other industries – in many sectors, salary rises have been quite small and have been affected by the recession and the downturn in the general economy. Thus, overall wages and salaries in British industry have gone up about 6.5% on an annual basis, whereas the computer sector has enjoyed a higher increase during this period.

When measured against the rate of inflation, salaries in the computer sector have not moved up as much as retail prices. According to the latest official statistics, inflationary trends went up by about nine per cent up to the second quarter of 1982, though, since then, the rate of price increases has slowed down and is now believed to be about seven per cent.

There were many reasons for the slowdown in salary increases, but one of the main factors has been the dramatic fall in inflationary trends. For instance, retail prices in 1980 went up by 12%, while in 1981, the rate of inflation was about 18%.

Another important influence has been the trend in employment in the computer industry. There have been considerable cutbacks in the level of employment in the computer hardware sector, with the number of full-time employees falling by over five per cent among leading computer companies. Moreover, unemployment in the hardware industry has increased, with the total rising to over 12% of the total labour force.

According to Dr Doug Eyeions, director general of the Computing Services Association, there has also been a shake-out in the computer services sector, with many firms looking at their staff requirements closely. The latest figures indicate that full-time employment in this sector has dropped by about two per cent compared to 1981.

Another important influence has been that many companies have seen their profit margins under pressure through tough competition, and, as a result, they have been keen to control their costs as much as possible.

Naturally, salary increases do not provide the full picture for remuneration, as fringe benefits now play an important part in staff payments in some areas. The Computer User's Year Book analyses certain types of fringe benefits, such as the provision of company cars.

On the whole, there has been a small increase in the number of DP managers receiving company cars in 1982, though this trend has varied according to the type of job and the location of each firm.

In 1982, nearly 56% of all DP managers had a company car as against 53% in the previous year, though there has been a drop in the percentage of operations managers with company cars.

On the whole, computer managers in London and the South-east tend to receive more fringe benefits than their counterparts in the North and other parts of England. The survey shows that nearly 60% of DP managers in the South had company cars in 1982, as against only 51% in the rest of the country.

In addition, those in the higher salary brackets, that is £18,000 or over, stand a very good chance of having a company car, as over 70% had this facility in 1982 as against less than 64% in 1981.

There are considerable variations in the salary structure of the computer industry, depending on the size of the company. The differences can be as much as 20%, and, normally, larger companies will pay more than a smaller one by a significant margin.

These results are contained in a recent survey published by Reward Regional Surveys. This company releases its results every March and September.

It should be stressed that the investigation carried out by Reward Regional Surveys are normally not as extensive as those by Computer Users' Year Book, as only about six hundred companies are included in the sample nationwide.

According to Reward, variations occur according to the regional factors, and, as one would expect, London and the South-east show some of the highest pay structures. But one interesting figure which this survey throws up is that Scotland is now among the highest paying regions in the UK, and, in some cases, provides better rewards than the London area. In September 1982, for example, a computing manager in the London area would earn about £15,433, compared to £16,164 in Scotland.

It is difficult to predict the prospects for salary increases. For one thing, the trend in the general economy in terms of growth and employment have to be taken into account. At present, it appears that some recovery in economic activity may occur during the next 12 months.

Inflation is another important factor, and many commentators are now confident that the rate of price increases will slow down even further. It may fall to about six per cent per annum during the coming years which will be one of the lowest rates of inflation for many years.

A key factor, how... will be the level of ... ment in the computer... dustry. Falling employ... is not likely to ... pronounced as ... 12 months, but many ... puter hardware compa... will look for further ... tions and streamlining ... their operations over ... next few months.

In the case of the com... ter services sector, prosp... for employment are high... and, as total billings ... speed up, it is unlikely ... any further fall in sala... levels will occur, and ... some types of personn... there could be an increase ... the level of demand over ... next twelve months.

On balance, it is expe... that employment levels ... remain fairly stable, alth... the reductions which ha... occurred in recent mo... will not be repeated ... 1983.

If this background is ... rect, this will provide an ... encouraging environme... for salary increases, ... of the economic climate ... financial constraints, ... rises will be watch... carefully by many co... panies, and, unlike ... the growth in total remu... ration in the computer ... tor will probably be fe... the same level as inflati...

Thus, average increas... six per cent per year ... likely, while some of ... highly skilled perso... could receive increas... 10% or more.

All in all, the outlo... salary gains in the comp... industry look more pro... ing over the next ... moreover, higher ... benefits are also likely ... given to attract the ... type of personnel, espe... in the services sector.

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DEC/RSTS Commercial
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CP/M Systems Support
London **£8K+ car**
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S/W and H/W Designers
Wilts. **£8-12K**
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DEC Prog/Analysts
Beds. **to £10,000**
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LABOUR DEMAND

Paul Fisher reports on the employment prospects in computing

Industry is looking for staff with specialist skills

RECRUITMENT into the computer trade has levelled out with the demand for labour remaining similar to this time last year. If not growing, it nonetheless remains a fairly healthy business to be working in.

Computer people are changing jobs at about the same rate as last year. *Computer Weekly continues to* thrive on much the same number of job advertisements, this Compec supplement is still a substantial publishing venture and the Compec show itself will pack 40,000 fully employed individuals through its turnstiles.

Compec's hordes will be a fair cross-section of the trade as a whole. There will be no discernible orthodoxy among them about the question of computers creating or destroying jobs. Some would push the line that digital technology is essentially labour saving and that is a vital part of many a sales pitch, however discreetly introduced.

Others would sit on the fence and talk of increased efficiency and redirection of labour, while optimists would assert that the technology on display creates *fresh demands for new services.*

People outside the computer trade have a far simpler view and hold that technology destroys jobs. This is hardly surprising when the creation of poverty and unemployment on a scale to match the Thirties has coincided with endless hullaballoo about new technology.

Since the Tories came to power, unemployment has leapt from a little over five per cent to nearly 14% of the workforce. Of the 3.3 million *people now drawing* dole, 400,000 have been doing so for two years. While workers in heavy *manufacturing* and the public sector have seen their jobs disappear, workers in the computer trade have prospered.

In Compec, with its conspicuous display of commercial techno-brightness, the place to point an accusing finger? Many would say it is, and they can back the "More technology equals less jobs" claim with arguments of some substance. Take for instance, a Labour Research Bargaining Report which examined 127 offices where modern equipment had been installed. It found that a third of them had reported job losses.

Perhaps that is all the less reason to blame automation, because in those 40 or so offices efficiency had been *increased. Perhaps it is a* problem of the economy as a whole if those who were made redundant can't find more productive employment than merely doing what a word processor can do better.

If the economy continues to stagnate, then technology will take a portion of the blame for further unemployment. It doesn't have to be this way though. Computers do not exist in a situation of static demand, there is no fixed amount of goods and services required.

Technology can, and should be, a tool for creating prosperity. To take a banal example, during the time that UK unemployment has all but tripled, Japanese unemployment has all but doubled – from one per cent to two per cent. It would be difficult to blame that on technology.

Having become as firmly established in society's *infra-structure as the* motorway network, the future of the computer trade will now tend to reflect the economy rather than act as a stimulant or a depressant.

To concentrate investment in service sectors of technology might not be particularly productive. Increased investment here would, of itself, have a relatively *small impact on* unemployment.

Even the vastly optimistic Report on Cable Systems, *commissioned by the gov*ernment and prepared by the Information Technology Advisory Panel, did not anticipate any huge effects on employment.

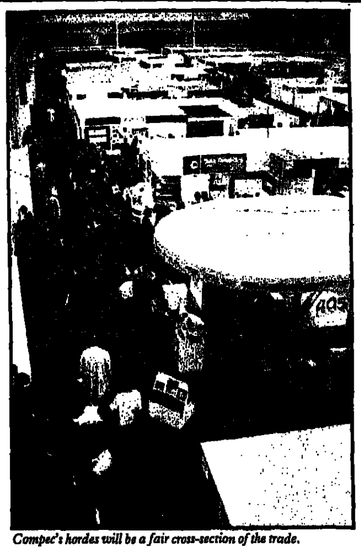
Optimism will rule at Compec. Among the exhibits there will be even fewer mainframe products in evidence than last year, with more emphasis on products for smaller localised computing needs. There has been a *corresponding shift* in the demand for labour, a factor borne out by the experience of recruitment *agencies.*

Alan Williams, of Sales and Marketing Recruitment points to communications and *microcomputing* as growth areas but does not see micros creating much demand for labour.

This is partly because they are manufactured in the US or Japan and partly because of their tendency to rely on packaged software. And the demand for packaged software he thinks is spreading upwards from small systems thus tightening things up in the market for programmers.

Les Clarke, manager of Knights Programming Support, has a similar report. Demand for menial DP work has dropped as has the demand for Cobol programmers. Clarke reckons he has placed 20% more contract programmers this year although this could be *an indication that* employers are no longer prepared to hire permanently.

Clarke has looked abroad to expand his business and what UK growth there has been for him has come with scientific work, particularly for programmers with skills in Fortran.



Compec's hordes will be a fair cross-section of the trade.

If Hewlett-Packard is anything to go by, employers are getting very picky indeed. HP has recently opened a software R&D centre (significantly enough for office products) and says it chose the UK as one of the best sources in the world for computer science graduates. Before hiring 14 graduates, it interviewed no fewer than 400 applicants.

Looking at other established computer manufacturers, it is clear that their labour demand is fairly static.

On August 31 this year ICL had 23,830 on its payroll, of whom nearly one third are working abroad. That is a reduction from 1981 when it employed 25,564 and a further reduction from 1980 when it employed 33,087. However, for the first time in three years it has taken on graduates with 300 fresh college leavers coming on to its books this Autumn.

IBM has had a more modest demand for graduates and only took on 72 this year, most of them into systems engineering. It "expects to employ more next year". Meanwhile it has kept its UK staffing at a constant 15,000 since 1980 with a turnover well under five per cent.

For the unskilled newcomer to computing, things are tougher than ever. The Manpower Services Commission trained 4,300 under the Tops scheme between April 1981/2 and 1,480 under the Threshold scheme.

An MSC spokesman says: "We anticipate no upturn in demand for the next year and therefore our intake on the courses will remain constant."

Another indicator of lack of buoyancy in computer recruitment is what those already employed have negotiated in this year's pay round. The most recent Computer User's Year Book carries a survey of 1,289 DP sites and reports a below inflation salary increase averaging out at 7.7%. This compares with over 15% in 1981. Skill and position claimed the largest increases with systems programmers getting 11.6% and data processing managers nearly 10%. Operators only managed four per cent.

To conclude, the computer recruitment market is in fairly good shape. Demand is shifting from mainframe skills to more specialised skills in micros and communications. As ever, skill is at a premium. Overall there have been few signs of growth this year and, as long as the recession continues, any growth there is will be local.

Compared with computing in the Seventies, there are on the gloomy side, it's a more difficult industry for the newcomer to enter and the rewards are no longer increasing exponentially.

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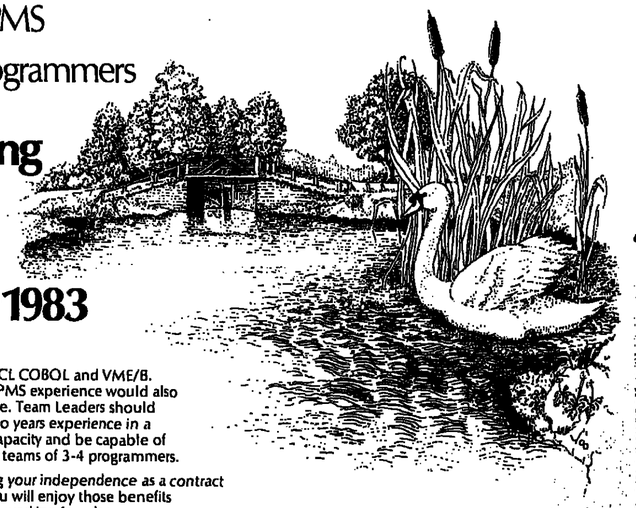

Here in the heart of Wessex, in a picturesque country town set on the banks of the River Avon, our Client has established a highly sophisticated ICL systems operation which is currently moving into a further period of exciting development. Hardware consists of 2 x 2956 and 1 x 2966.

Through forward planning, we are able to interview people now for 6-12 month contracts starting in January, February and March next year.

We shall be looking primarily for a minimum of three years experience plus a sound knowledge of ICL COBOL and VME/B. IDMS and/or TPMS experience would also be an advantage. Team Leaders should have at least two years experience in a team leading capacity and be capable of leading project teams of 3-4 programmers.

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L B M S

Chance is a fine thing, but...

There is now a powerful alternative to the "roulette" procedure for selecting contractors.

The National Computer Contract Directory is now working. Both contractors and subscribers are NOW deriving major benefits:

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1. Substantial increases in income.	**1.** Positive reduction in costs.
2. Far wider choice of assignments.	**2.** Access to a large central source of people AND information.
3. Service completely free of charge!	**3.** Total cost of approximately £1 per day!

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Bringing contractors and computer users into direct contact, in a major and practical way, is the service the industry has been asking for. The National Computer Contract Directory fulfils this need and is becoming the standard tool for anyone whose job it is to resource a project.

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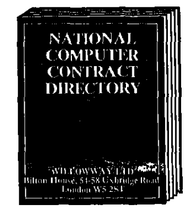

The National Computer Contract Directory uses technology to assemble and maintain a central COMPREHENSIVE source which is available to EVERY computer user.

It may be a fine thing but there is now an alternative to relying on chance!

Your entry will remain permanently in the directory. All you have to do is complete this form. It costs you nothing and gives you access to substantial increases in income and a wider choice of contracts.

DIRECTORY ENTRY DETAILS — THE DIRECT ALTERNATIVE

This section is not for publication. (Contact details are not released without prior consent).

NAME: –

ADDRESS

TEL. NO.:

NO OF YEARS EXPERIENCE

PREFERRED UK WORK LOCATIONS:

WILL YOU CONSIDER WORKING ABROAD?

WHEN WILL YOU BE ABLE TO START YOUR NEXT CONTRACT? MONTH YEAR

JOB CATEGORIES

CATEGORY	NO OF YRS	CATEGORY PREFERRED
PROGRAMMER		
ANALYST		
ANALYST PROGRAMMER		
SYSTEMS PROGRAMMER		
CONSULTANT/PROJECT MANAGER		
OTHER – SPECIFY		

HARDWARE EXPERIENCE MACHINE	MONTHS	PROGRAMMING LANGUAGES E.G. APL, FORTAN ETC	MONTHS	APPLICATIONS SOFTWARE E.G. CICS, TOTAL ETC.	MONTHS	SYSTEMS SOFTWARE E.G. DOS, MVS ETC	MONTHS	APPLICATIONS E.G. PAYROLL, ORDER ENTRY ETC	MONTHS	ENVIRONMENT E.G. BANKING MANUFACTURING ETC	MONTHS

FURTHER INFORMATION: (NOT MORE THAN 50 WORDS) PROGRAMMERS ARE ADVISED TO DESCRIBE THE DEPTH OF THEIR PROGRAMMING EXPERIENCE AND ANALYSTS SHOULD LIST THOSE AREAS OF SYSTEMS ANALYSIS IN WHICH THEY ARE EXPERIENCED I.E. FEASIBILITY STUDIES, SYSTEM DESIGN, PROJECT RESPONSIBILITY, USER INVOLVEMENT, MANAGEMENT EXPERIENCE ETC. IN ADDITION YOU SHOULD MENTION ANY SPECIALIST EXPERIENCE YOU FEEL IS RELEVANT TO THE CURRENT MARKETPLACE.

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This major project requires high calibre staff at all levels and a degree or equivalent professional qualification is highly desirable and mandatory at senior levels.

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To plan, supervise and implement all OS/VS1 CICS and IMS systems software functions and interface with the PDP 11/70s FEP and stand alone systems.

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A minimum of at least 2 years' experience with OS/VS1 internals JCL, IMS and CICS. DEC-based systems knowledge would be an advantage.

Senior Systems Analyst
A minimum of 7 years designing, planning and implementing commercial and scientific applications. Must be a good communicator with Management capability. Must be fluent ARABIC/ENGLISH.

Analyst/Programmers
A minimum of 5 years' experience in an IBM environment with either Assembler, COBOL or PL/1 is essential. FORTRAN, BASIC or APL experience would also be useful. For one position fluent ARABIC/ENGLISH is essential.

Programmers
A minimum of 3 years' experience in an IBM environment. Language requirements as for the Analyst Programmers.

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Operators
OS/VS1 CICS experience essential.

EXPANSION of MVS FACILITIES

3033 MVS JES 2, ADABAS, COM-PLETE, ACF/VTAM and NCP also MSA packages. All applicants should have worked on IBM equipment.

Project Manager
To supervise a project team responsible for a highly sophisticated document retrieval and text management system. Applicants must have a minimum of 6 years' experience including in-depth text editing experience ideally using STAIRS or a similar product.

Analyst/Programmers
A minimum of 5 years' experience, with at least two in a TP environment using COBOL.

Shift Leader
Minimum 6 years' IBM experience including 3 years MVS JES 2; sound knowledge of JCL.

Operations Support Technician
6 years minimum IBM operating with at least 2 years MVS/JES 2, first class JCL writing. Proven Diskspace and Library management experience. First-hand experience of FDR, TMS, PANVALET.

Senior Operators and Operators
A minimum of 4 and 2 years' experience respectively plus exposure to JCL, FDR and TMS.

370 OS/VS1 under VM, CICS

Systems Programmer VM CICS
To assist in the upgrade of an existing IBM 370 with system enhancement and performance tuning and to assist in the forward planning and implementation to a 43XX configuration.
DEC 11/70

Analyst Programmer
4 years' minimum experience of PDP 11 series MACRO 11 essential, some operating systems experience advantageous.

For further information please telephone Jenny Dalrymple-Hay or Ian Murrey West on 01-493 2947 (to 9pm Monday-Friday), or at weekends Jenny on 04946 4579, or Roger Allington on Little Gaddesden (044284) 3536, quoting Ref. 9938.

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- Hardware Support Engineers
- Hardware Technicians
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- Applications Programmers/Analysts

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For any of these positions telephone or write for an application form to Steve Williams or Vic March at Systime Ltd., Millshaw Park, Leeds. Phone Leeds (0532) 702211. Interviews will be held locally.

SYSTIME

A few of our exhibits

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(Watford)

Progressive computer equipment manufacturer urgently needs a competent all-rounder, as No 2 to the DPM, to undertake all aspects of their major systems development programme in the Financial and Field Service application areas. Current systems are running on ICL System 10, IBM Series 1 and micros, with ICL System 25 planned for the near future. Essential requirements are two years programming experience and four years analysis/design, ideally including online projects in a related field.

SENIOR PROGRAMMER/ANALYST to £10,000
(West Middlesex)

An exciting career possibility for a programmer/analyst who can demonstrate technical competence and professional commitment. This large retail organisation needs you to take projects from the user feasibility stage through design and programming to implementation. A super environment and well conceived development plans will give you the job satisfaction and security which is now so important. Essential requirements are IBM OS/VS1 COBOL and a willingness to roll up your sleeves when necessary!

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ANALYST/PROGRAMMERS c£10,000
(Berks)

Super online development opportunities with a major food processing company committed to a complete DP rationalisation program. COBOL skills gained in a commercial or financial environment using mini hardware and ideally combined with analysis/design experience will help you to key positions in a cohesive and friendly team.

TECHNICAL PROGRAMMERS to £9,500
(Bracknell area)

This small but fast expanding systems and software group operating in the defence, scientific and industrial product areas have several vacancies for scientific programmers wishing to escape the "back-room boffin" syndrome. Customer contact will be an integral part of most projects, your initial task being a real-time simulations system using PDP 11/34s front-ending VAX 11/780 processors. You will need at least two years relevant experience including RSX 11M and MACRO 11.

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Interesting role supporting clients of a progressive micro and mini-based systems house. Duties will include troubleshooting, ongoing systems advice/enhancement and user training. Systems and programming experience would be advantageous, but more important will be general business experience combined with an appreciation of the computer market place, a sound knowledge of basic accounting procedures and confident communicative skills. Some European travel may be involved, so a foreign language would be useful.

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This is an outstanding opportunity to join one of the foremost names in bespoke off-the-shelf software packages, a company which is really going places. If you've had at least three years' success in selling proven application software to software houses, commerce and industry, you will enjoy the total support and success our client can offer you. Excellent package includes high level basic, commission (+ guarantee), company car and top fringe benefits.

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(All areas)

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(1571)

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(1634)

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Our rapidly expanding on-line Network, (at present time one of the largest of its kind), needs an additional Telecommunications/Data specialist, to join our Network Control group, based at Croydon.

The Data Network at present consists of approximately 1200 terminals, attached to Amdahl V7 & V8 Processors. A further 50% growth is expected over the next few years including significant moves toward Distributed Processing.

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A considerable amount of travel throughout the South Eastern Region will be involved in this position, for which the appropriate car allowance will be paid.

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(1588)

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Applications are invited for above post within the recently formed Department of Computer and Management Studies.

Candidates should have wide practical experience of Data Processing in industry or commerce and have interest in teaching in one or more of following areas: programming (BASIC and/or COBOL); computer applications in business; micro computer systems; systems analysis.

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(1663)

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Salary will be on the scale £5550-£6085 or £6375-£11105 per annum, depending on age, qualifications and experience. Applications, quoting reference CDM/129/BC and including a full c.v. and the names of two referees, should be sent to Mr. J. Tilbrook, Department of Computation, UMIST, PO Box 88, Manchester M60 1QD. The closing date is 19 November, 1982.

(1624)

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Working primarily as point of contact between the computer department and the Materials Supply departments you will be responsible for the supply of D.P. Services to those user departments from initial enquiry through feasibility studies, systems design, documentation, user training and to final department acceptance. Although the Company has a large IBM configuration, specific hardware experience is not important as training will be given if required.

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(1658)

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DEC/HP/WANG/DG Basic · Cobol – Berks · Surrey	to £12K	**FERRANTI/ARGUS** Berks · Surrey	to £12K
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Leading City Merchant Banks seeks Senior programmer/analyst with IBM 34 RPG II experience gained within banking.

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City based North American bank seeks analyst/programmers with IBM 34, RPG II experience and at least two years' banking experience.

SENIOR PROGRAMMERS
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Large American bank in the City is looking for two senior programmers with experience of IBM Cobol, DOS/VS or VSE and CICS and DL/1. Banking experience useful, but not essential.

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International City bank is looking for a programmer/analyst with relevant IBM 34, RPG II experience gained within banking.

PROGRAMMER
£9/£10,000 plus mortgage benefits
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- Software Engineers
- Design/Development Engineers
- Systems Programmers
- Systems Analysts/ Programmers
- Customer Service Engineers

You must be DP professional, imaginative and innovative — looking for a chance to try new ideas — supported by an already proven background. So, a minimum of 2 years experience in one of the above project areas is mandatory and, if also qualified to Degree level this would be an advantage.

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BANKING

No easy solutions to the banks' requirements

Emlyn Williams looks at how recruitment firms can serve banks

THERE are three industries, above all others, which directly reflect the evolution of the world in economic, political and social terms. They have tended to develop requirements which have driven information technology ahead, rather than simply making use of advancing technology.

These industries are aerospace, oil (particularly exploration) and banking. It is not by accident that they spend vast sums in the creation of information systems, since their performances have to be of the highest order. Nowhere is this more true than in banking, which is inevitably the institution whereby world trading and the processes of living are sustained.

Of late, much publicity has been given to some of the problems facing the world of international banking, in particular, and doubt has been voiced in many quarters about the safety of the world banking system. Such problems have been exacerbated as it has become increasingly difficult for banks to raise enough funds to meet the ever-increasing requirements of international trade and country funding.

This fund-raising difficulty is the result of two fundamental considerations:

1. There is now very little surplus oil money circulating within the banking community — for example, the OPEC countries now have a current account deficit of $9 billion up to September 1982.

2. The banks now experience much greater competition for money from such quarters as building societies and trust companies.

This all adds up to the fact that large banks, particularly international banks, see a marketing shift in their future — for example, reduced lending to countries which have difficulty in repaying their loans.

Consequently, the multinationals, large corporations and institutions have become a more attractive proposition, since their business is international and therefore slightly less subject to the fortunes of one country. Competition for this sector is going to be more severe than ever before, and the key to success lies with the banks which are best at satisfying these clients on a world-wide basis.

This means that banking services will become more specialised among the larger banks, with the small and medium sized banks pursuing their own specialisations.

Despite a temporary lapse in demand for qualified personnel, the banks will inevitably look for certain key skills to meet and overcome challenges to their future. More than ever before, multi-disciplined teams to chart the way ahead will be needed.

Foremost among the technical disciplines required will be proven database management and communications expertise. Since the banks will be looking to their future requirements, a broad and detailed knowledge of banking in both technical and business terms will be required, causing a real demand for senior technical managers and project managers with experience in this field, to co-ordinate, guide, and measure development of what will be large, multi-disciplined project.

Inevitably there are very few people who will be able to provide all the necessary skills; consequently demand will exist for each skill to be able to inter-relate closely with the others.

Such inter-relationship will occur along parallel lines, and will therefore require key personnel to possess the ability to relate laterally to each other, as well as forwards to cover forward thinking.

Complementary to such key skills will be sustained demand for personnel with systems knowledge and implementation experience within banking, who quite often will have to be capable of working in dispersed overseas environments on detailed adaptation of application software standardised for global use within a bank.

Demand will remain for IBM 38/4300, etc, experience, concentrating on RPGIII and Cobol, CICS, DL/1, etc. But microcomputers will increasingly penetrate banking and the advent of 16- and 32-bit micros will necessitate design knowledge of transaction processing and the ability to write high performance front-end and on-line updating software.

Increasing emphasis will be placed on application dedicated, sophisticated, micro-based systems linking into mainframes and ultra large, dispersed function processors. Particular expertise will be required in the design, integration and evolution of such systems for the mid to late '80s.

A picture now emerges, the effect of which is to produce converging considerations, identified as follows:

1. Banks will have requirements for which there is no easy way to find a solution: the inevitable intellectual incest of a closed environment will drive banks — just as in the past — to go out and seek fresh key expertise, to infuse new impetus to the planning and implementation of systems.

2. Specialist DP recruitment concerns (involved in communications, database, etc) — in the same way as bank personnel departments and software houses — are going to find it increasingly less cost-effective to supply a bank with multi-discipline skill requirements on their own. It is necessary for the recruitment agency involved to possess a real track record and in-depth understanding of the intended discipline and specialist systems areas involved.

It will be economic naivete to attempt to supply key skills to banks without the ability to demonstrate adequately a real understanding in this field. Since so much will be at stake for a bank, market response will be very selective and biased towards agencies which demonstrate in-depth understanding, creating credibility and professional trust.

Where does the solution lie?

The successful recruitment specialists will see the true economic sense (when marketing costs are accounted for) of syndicating together to supply a major client — in much the same manner as banks do when funding a large loan — yielding greater net revenue per syndicate member. In this way a one-stop supply source of skills will be established.

The composition of such a syndicate would comprise a specialist recruitment concern exclusively involved in supplying the banking and insurance fields, plus member agencies with a track record and expertise in finding and supplying specialist skills.

The initial effect would tend to be the reduction of individual placement revenue, but would provide two major benefits - greater placement opportunities per syndicate member-agency in a specialist and still most affluent market; and higher net revenue since marketing costs would be dramatically reduced.

Emlyn Williams is managing director of Lombard Systems International.

Banking is one industry which has driven information technology ahead

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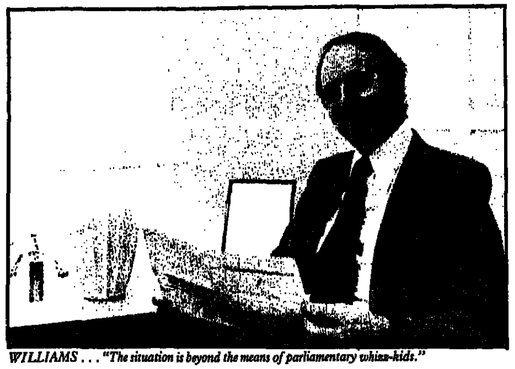
THE SALES RECRUITMENT SCENE

Alan Williams warns that, as the technological revolution bites, 'things could get much worse for some companies'

Small, up-and-coming firms doing better than the 'giants'



WILLIAMS . . . "The situation is beyond the means of parliamentary whizz-kids."

LOOKING back at my notes for 1980 the most significant thing to strike me was the comments I made *about unemployment in that* year. Two million out of work seemed to be a very big number then, yet here we are two years later with twice that figure (if you take into account those people *who do not or cannot* register as unemployed).

At that time I was having trouble convincing people we would have five million unemployed by 1985, and while no one actually laughed at my unfunny prediction, I don't think it was taken too seriously either. The way things are it seems we won't even have to wait that long.

I believe it is only just beginning to dawn on some politicians, but certainly not all, that we have a situation on our hands that is beyond the means of parliamentary whizz-kids and faceless civil servants.

The hard core effect of technological revolution is upon us and only tomorrow, via the means of that exact science hindsight, will we discover who paid the price for this "brave new world".

It is so easy to be complacent within an industry such as ours which continues to enjoy a significant overall growth despite difficulties in some areas, much of which is unquestionably at the cost of many of those who have already or will eventually join the ranks of the unemployed. Yet there are signs that things could get much worse for some computer companies and problems of survival will not be limited to the new or small companies.

Many long-established major computer suppliers will need to do some deep thinking and carry out some draconian actions if they intend to be around much longer.

There is at least some comfort in the fact that there appears to have been no significant reduction in the amount of recruitment advertising since 1980.

Some of us continue to be busy with a comprehensive portfolio of job vacancies and client assignments but the overall picture is certainly affected by some major suppliers who currently have a formal or informal freeze on recruitment. In some cases this involves personnel of all types; in others salespeople are excluded. In some circumstances there have already been redundancies, in others the primary purpose of stopping further recruitment is to reduce the headcount by way of natural attrition.

The nature of response to advertising continues to be unpredictable in both volume and quality and thus we are unable to perceive any meaningful trend in the movement of salespeople. Certainly the response for management jobs has been as good as ever and conversely the supply of salesmen in the 25-35 age bracket with a proven track record of sales success within any significant sector of the computer industry continues to be as inadequate as ever.

Sales trainees don't stand much chance in any part of the industry, be they graduates new to the business, technicians wanting to get into selling, experienced salespeople from outside computing, or even those wishing to make a quantum leap from one computer product area to another.

What is the reality of the marketplace at present? Well, as ever, there is some bad news and some good news.

At the top end of the scale there has been and will be *much reorganisation*, rationalisation and even retraction among parts of the mainframe sector within a marketplace that appears to be at best static in terms of overall revenue growth.

In their last fiscal year some companies turned in performances against revenue target little better than 70% with individual branches barely achieving more than 20%. Others did reasonably well, but there were no "high flyers".

The minicomputer sector has not been without its problems either with some major manufacturers still applying a complete ban on all sales recruitment. The situation has much improved in the last few months, but one could hardly say this part of the industry is buoyant.

Last year there was considerable euphoria within the CAD/CAM sector with promises of vast revenues and considerable riches to be gained by the army of salespeople required by several relatively new entries to the marketplace. Unfortunately things appear to have gone quiet.

On the good news side some parts of the computer industry continue to do extremely well while others are positively booming.

Microcomputers obviously head the list with tremendous growth not only in the small business sector and throughout major corporations and institutions, but also the technical and industrial areas, particularly control systems. The opportunities this success creates for salespeople lie primarily within OEM/distributor sales for manufacturers or main agents. Selling one-off, low cost turnkey micro systems should be approached with caution as there is often insufficient profit margin to justify the cost of direct sales.

Suppliers of telecommunications equipment also appear to be doing well at all levels from modems and multiplexers to terminals and total front-end systems.

The financial pressures of economic recession have also had the effect of increasing the acquisition of external expertise as opposed to incurring the costs of growing it or sustaining it internally. Consequently there has been a significant upturn in the demand for turnkey solutions in the form of both total data processing systems and software packages. The increased use of contract personnel also comes into this category.

One dominating factor within this scenario is that, by and large, the small up-and-coming companies based on the latest technology products are generally doing better than the giants of the establishment.

For many salespeople who perceive within this situation the need to search for new pastures, these new upstarts offer the excitement, challenge and relative freedom of working within a small company environment. On the other hand they also imply much greater individual exposure.

Success or failure is much easier to identify when there is nowhere to hide.

For those who have already decided to seek a new job or may do so in the future there are some basic considerations. Most important is to consider whether changing companies is really as smart as it sounds. If you are happy with your product, your colleagues and your sales success, why move unless you are absolutely sure your career requirements cannot be satisfied where you are?

On the other hand, if you are absolutely convinced that your career objectives can only be met by moving, be sure you do so only after consideration of what you want from your career, how you can achieve it and the kind of companies where it can be found.

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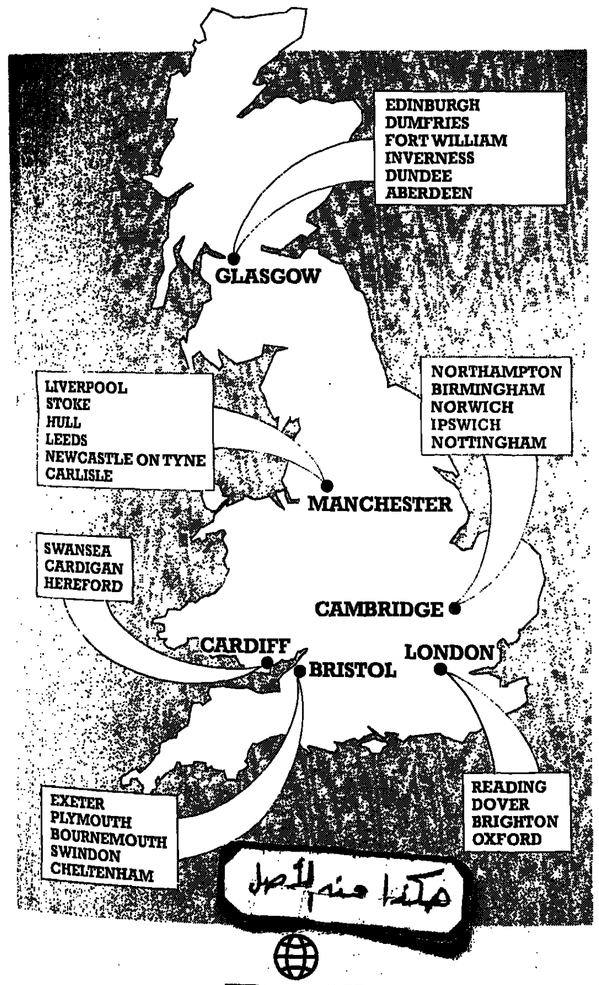

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GUIDE TO DP TRAINING

Alan Simpson beats a path through the mass of training schemes

An industry with 24,000 vacancies can't be all doom and gloom

DP training, it seems, is a matter of considerable interest – and irritation – to the DP industry.

Far from being a background service enterprise which it is hoped will produce suitable candidates or enhance existing skills, DP training has become in the past year a factor of front-page headlines, controversy and not a little agaro.

For a start, a specially designed training course to help the uninitiated would be useful. The items on this train-in agenda would include an explanation of such terms as Tops, Threshold, BEC and associated TEC plus Scotbec, MSC, PER, ITEC, RSA, CGLI, OU, IAM and not least IMS.

A quick discourse would also be helpful on the education and examination roles of such bodies as the British Computer Society, the IDPM and the NCC and an evaluation of their respective education and training qualifications.

Possibly the most newsworthy is the Tops scheme, organised by the Manpower Services Commission. In particular, the Tops courses have come under heavy flak from the IDPM, which believes that an industry register should be established to assist qualified Tops trainees to get into computing. Co-operation between the industry and the Commission is a matter of some urgency, the Institute feels.

At a time when the recruitment needs of the industry are not expanding, the increasing rate of production of qualified trainees is a troublesome matter. With a current estimate of over 7,000 DP personnel actively seeking jobs, prospects for first-time entrants are not bright.

However, when balanced with the shortage of programmers and analysts, currently reported as exceeding 24,000, the DP recruitment outlook is far from total gloom and doom.

Few would deny that the MSC is on the right track, particularly with regard to its ITEC centres which are designed to train, in the main, unemployed youth in basic computer technology. Given the impetus of the Information Technology Year publicity machine, companies are being encouraged to adopt the concept of the automated office. The resultant requirement for operators, programmers and controllers will be considerable for some time to come.

DP training in the 1980s will involve the office manager as much as the computer graduate. Possibly the most frequently heard question being asked by the company management of anyone in or on the periphery of data processing, is "How do we get started?" and the equally unanswerable question "What computer system do you recommend?" Even the most raw ITEC recruit would have no hesitation in answering that it all depends on individual requirements, both in the short and long term.

Given such a general air of uncertainty, it is not surprising that computer appreciation courses have become a strong growth area. Companies such as ITB, which offer both internal and external courses in basic appreciation and awareness, report that they are attracting representatives from both large and small companies.

The larger organisations are sending members of their junior management teams to gain a working awareness of the potential of the micro. Meanwhile, the smaller company representative is likely to be a senior director or partner, anxious to grasp the basic appreciation principles of computing technology.

Dr Adrian Stokes, director of computing at St Thomas' Hospital, who runs the ITB computer courses, believes that only a few companies are fully aware of the potential benefits of the micro – or the potential menace. Putting a micro into a company should be a controlled operation, preferably masterminded by one individual. Otherwise the organisation could end up with an assorted collection of incompatible Apples, Pets and DECs.

Closely involved in all levels of DP training is the NCC which, at the micro end, provides centres which supply user training and the opportunity to select (but not purchase) ranges of equipment. Keith Holden, who is responsible for the NCC training consultancy service, has a full-time task merely keeping pace with changing technology and user requirements.

STOKES . . . Putting a micro in a company should be masterminded by one individual.

Training new recruits to the industry a few years ago involved as few as 500 individuals a year. Now this number of programmers alone is needed each month. The NCC reports that the past year has seen a decline in the demand for new recruits, a factor which is being exaggerated by the non-movement of DP personnel between installations. As a result, Tops students are finding it difficult to get past the Threshold of the computer room.

However, the NCC sees the recruitment situation improving, but probably not to the previous job vacancy levels. Holden states that there is a strong question mark on the demand for Cobol programmers in the computer industry. The introduction of micro systems and application, operating and generator software packages will likewise reduce demand for trainees. Despite this, the NCC reports a continuing demand for training particularly in such newly emerging areas as Cobol 80X programming which will have a worldwide effect on all installations.

At the same time, in-house training awareness courses must respond to the introduction by manufacturers of new computers and communication technology. In turn, it will be the responsibility of senior programmers to translate the new features to their teams. On a wider basis, the NCC has established what it calls IT Circles. These aim to create a series of workshops which can respond to users' collective needs in the various developing areas of technology.

The circles often trigger a demand for specific training courses with the resultant material being used as the basis of possible regular NCC courses. The NCC also provides a series of public sessions both in London and Manchester covering such important DP technology areas as local and public data networks.

The greater use of package software has encouraged the NCC to set up a series of software appreciation courses for company management. These will include such well known packages as VisiCalc and Wordstar.

Away from DP appreciation and awareness training courses, computer training is a matter best handled by the many specialist training companies. Although sometimes expensive, the courses offer professional expertise in many levels and layers of technology.

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RPGIII, S/38	Programmer, Analyst/Programmer	Essex; Berkshire
PL/1, CICS	Programmer	London
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	Analyst, Analyst/Programmer	Home Counties
IBM Series 1, RPS	Programmers, Analyst/Programmer	London

For more information please contact:

Group Resources Department
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(1977)

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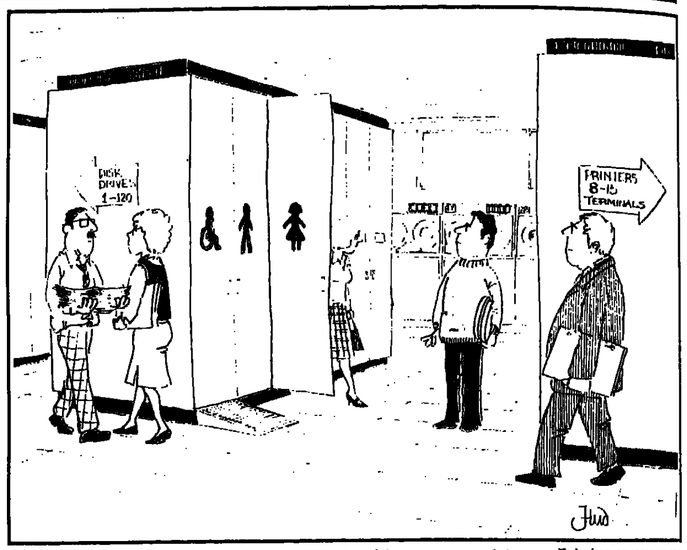
OPS JOBS

Operators will switch from a 'shop floor' to a supervisory activity, says Margaret Park

Not so much a dying breed, more a change of role



COMPUTER operators are like whales these days. Controversy surrounds the question of whether they are going to survive as a species and even whether it's desirable that they should.

What is certain is that the whole operations function is about to go through a radical change.

The metamorphosis of operators is one effect of recent progressions in data processing. Operators are the mainstay of the big mainframe computer installation. Sometimes described affectionately as "tape slaves" or "tape apes", they are responsible for running each job on the computer.

They are there to see that the machine gets the input information it needs, that the right sort of output is produced at the end of each job, and that jobs are run on schedule.

But mainframes are stepping aside for minis and micros which don't need operator intervention.

The operator is really a sort of interface between the user and that strange and frightening machine chugging away in the bowels of the building.

But in the last ten years computing, as well as getting cheaper and smaller, has moved towards letting the end user do as much of his own work as possible.

So with distributed processing and micros, the user – the accountant or salesman, for example – inputs his own data and gets back information via his own VDU.

In mainframe processing, operating systems are becoming more capable and there has been a big step forward in the sophistication of operating software.

Last month Computer Associates brought out an operations tool called CA Scheduler which does for a mainframe (CA's software is aimed at IBM machines) everything that an operator would do.

Scheduler is a high level control language which analyses the jobs to be done from information stored in its in-built database. It has a testing function which leads it to a decision about the priority to be given to various jobs, and totally automates the business of monitoring efficiency, timing and documentation of programs.

Each job is defined in the database and any external personnel merely have to update that database information if necessary.

When CA launched its operations management system, as it is called, managing director Harry Gordon said he wanted to "automate the last department in DP."

The point is that mainframe computing has to keep pace with other developments. If a user finds that a big centralised system is going to be complex and expensive to run in terms of clocking up a large salary bill for operators, then he's likely to turn to micros or distributed processing.

But this is not to say that the death knell has already sounded for operators. It means that their function is going to undergo a dramatic change.

Instead of being the "shop-floor" activity it is now, operations is going to turn into a much more supervisory activity.

The job will be upgraded, but as is usually the case when job functions change and become upwardly mobile, there will be fewer operators around.

In an average size DP department a software product like CA's Scheduler will do the actual operating, taking the place of half-a-dozen shift-working operators, and one person will be all that is needed on each shift to look over the shoulder of the system.

The operations management systems cost several thousand pounds, but they are still cheaper than buying the attentions of a team of operators.

A survey of salaries and the cost of living, published in October, discovered that already computer operators don't exist in their old numbers.

Peter Brown, of Reward Regional Surveys, which produced the report, said: "Computer operators do not represent a significant job category in most of the companies we surveyed.

"Only very large firms still run mainframe installations. In almost all the companies we sampled, minicomputers are being installed in user departments," he said.

So rare a breed are operators these days that they didn't even merit a mention in the survey's look at salary averages and increases.

All this sounds like gloomy news for operators. But the message has to be that operators must realise how things are changing and be prepared to make themselves upwardly mobile in the jobs market before the market leaves them standing.

Existing operators are either going to slot into the supervisory role that seems to be being carved out for them, or they will think about moving on to programming.

The operator's job, like all those at the production stage of any process – manufacturing for example – has undergone more changes than any other DP function.

From the days of punched cards and paper tape things have moved on considerably, and operators have been expected to adapt.

London, Home Counties and Overseas

HERTFORDSHIRE. Hardware/Software Design Engineers to join a market leader in sophisticated process control systems. Experience of DEC Minis or Motorola Micros would be a decided advantage along with a degree or equivalent in a computer-base subject. *Ref/HAL/7/10*

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BERKSHIRE. IBM Mainframe. A leading European consultancy requires a consultant with good experience of CICS, IMS or MVS to install a broad range of software products. Opportunities are excellent as this company has offices throughout Europe. *Ref/HAL/10/10*

BERKSHIRE. 32 Bit Mini Manufacturer (market innovators) has three appointments in different areas of application: (1) with Cobol Compiler expertise, (2) with DMS and/or DBMS skills, (3) with a good knowledge of data dictionaries along with some Cobol. *Ref/HAL/11/10*

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(1883)

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JobSpot

dp Confidential reply

PROGRAMMER ANALYSTS TOP SALARY

Our client, a well known and established manufacturing company with locations throughout the UK have agreed a strategy increasing their commitment to DP services. Current hardware is based on two IBM 4341's running under DOS/VSE and the company would like to hear from Programmer Analysts with around two years' experience on IBM mainframes supporting Cobol. Candidates should have the ability to write and design systems in an on-line environment and a knowledge of CICS or DL/1 though not essential would be advantageous. In addition to an attractive salary, a range of benefits are available normally associated with a company of their standing.

LOCATION: OXFORDSHIRE — JA308/1

HFC Trust

PROGRAMMERS to £8,500

HFC Trust Limited are a major consumer finance and banking service organisation with over 140 branch offices throughout the UK. Increasing business has created a requirement for a number of Programmers to complete a development team now implementing a system designed as the basis of a network supporting all the UK branches. Applicants should have 18 months' IBM COBOL experience, with a background in any one of the following areas – OS/VS1, JCL, CMS DL/1 or Easytrieve. In addition to salary there are a number of benefits normally associated with a financial institution including non-contributory pension, BUPA and free life assurance.

LOCATION: BERKSHIRE — JA308/2

dp Confidential Reply

PROGRAMMER ANALYST to £10,500

One of the world's leading manufacturers and suppliers of photographic materials and equipment are seeking to expand with the addition of a Programmer Analyst. Ideal candidates will have spent a minimum of two years' programming in Cobol and had an exposure to analysis in a commercial environment. The current hardware strategy is based on a range of Honeywell equipment and therefore knowledge of GCOS and TP88 would be highly desirable. A familiarity with the principles of IDSI would also be advantageous. In addition to salary there are a number of large company benefits which will include assistance with relocation.

LOCATION: CHESHIRE — JA308/3

OCL

SYSTEMS PROGRAMMER

£ excellent

Overseas Containers Limited, a world leader in container transport, has a requirement for ambitious **Systems Programmers** who are capable of exploiting their experience in an innovative and dynamic environment. The ideal candidate will have a thorough knowledge of DB and TP software (preferably IDMS, CICS and VTAM) and will form part of the TP support team. This team will be involved in major software upgrades to support an expanding TP network. Software plans for the coming year include installation of NCCF/TAF, ACF/VTAM version 2, MVS/SP3 and CICS 1.6. OCL offer excellent salaries and the usual benefits associated with a large organisation.

LOCATION: LONDON — JA308/4

dp Confidential Reply

Systems Designers to £13,500

Our client has an international and dynamic reputation for designing and building fully integrated software and engineering systems. New orders have provided interesting opportunities for Systems Designers to work on the development of display and data handling systems for advanced technical applications.
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LOCATION: ESSEX — JA308/5

MPI

PROGRAMMER

to £12,000

Microcomputer Products International are leading suppliers of software for CPM based micro's. Planned expansion has created the need for an additional **Programmer** to provide customer support and develop programs and systems, utilising an extensive range of microcomputers. The successful candidate should have gained around five years programming experience in a large mainframe environment supporting Cobol. In addition a knowledge of Assembler is desirable and applicants will be able to demonstrate effective user liaison skills. Salary is in a range according to experience and in addition to usual benefits this position will attract free membership of BUPA.

LOCATION: BARKING — JA308/6

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Programmers	IBM 4300 DOS/VSE COBOL CICS DL/1	London
Programmers	IBM COBOL CICS DL/1 JSP	London
Programmers	IBM MVS COBOL JSP	London
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The experience required for one position is a solid analysis background in general commercial systems with exposure to various environments and hardware. Ideally to have some programming and systems design knowledge at a technical level.
The second position is for a person with in-depth experience in Personnel and Management Information Systems, preferably gained in a large company.
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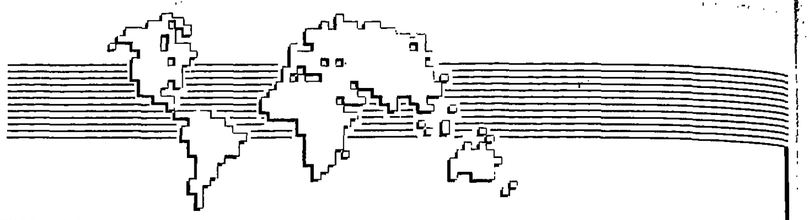

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(1601)

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up to £12,000
(review March '83)

City of London

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As a result of expansion in their commercial division, they now seek an ambitious Analyst/Programmer with at least 3 years' experience of programming and systems design using BASIC+ or +2 on DEC hardware. Experience of payroll, stock control and similar applications would be advantageous.

As Project Leader, you will be responsible for most aspects of the development of sophisticated systems using the latest DEC hardware and software methodology, encompassing pre- and post-sales support, systems design, programming and team leadership; a high degree of involvement with the company's clients is envisaged, and you will be encouraged to take an active part in the development of new business areas.

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★ Programmers with 2-3 years experience.

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This is an excellent opportunity to join an interesting and exciting company who are constantly developing and expanding their business into new areas of activity and are therefore able to offer a wide scope of opportunities for people wishing to develop their careers. Ref: 1111/B

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Computing Services Association

(1562)

MARKET FOR PROGRAMMERS

As turnover has slowed down, so have competitive salaries in what remains a healthy field, says Margaret Park

Downturn has brought a change in programmers' jobs

THE job market for programmers is one of those much discussed and rarely settled issues that appears to change with the speed of the British weather.

Every shock-horror scare about programmers' future has been aired, denied and argued over.

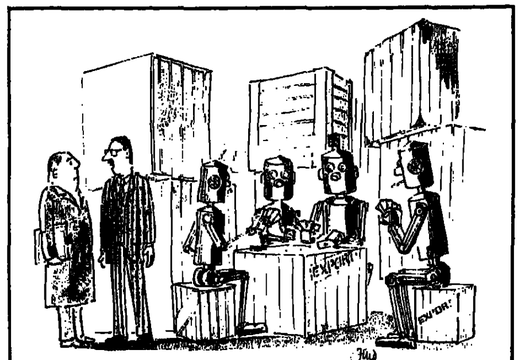
First criticisms were that programmers were so badly trained that they were unemployable before they began their careers. The government sponsored Tops retraining schemes have been under heavy fire for attempting to teach too much in too short a space of time and with inadequate teachers and facilities.

"Tops students always need training from scratch when they arrive on site," said one exasperated employer. "More damage than good has been done by the Tops courses – they have to be completely re-educated in programming techniques," he added.

Other employers swear by Tops graduates, and will accept no substitute. Star Computer Group went for a job lot of 10 Tops graduates in August. All were taken on as programmers.

The recruitment market for programmers is not quite the boom area it was a few years ago. Then programmers seemed to have an unlimited choice of jobs, salaries and locations.

For graduates from universities and polytechnics, salaries and prospects in the computer industry soared way ahead of every other profession. Numbers of undergraduates studying engineering and computer science even threw up their courses in favour of immediate cash.



"I want whoever programmed these robots in my office NOW!"

Jobs were in such plentiful supply that getting the actual degree wasn't always a necessity.

But from 1980 onwards the recession slowly started to bite even in this self-sufficient corner of industry.

Consequently programmers and other computer workers have become just like every other employee. They think long and hard before throwing up one job to move to another.

So as turnover has slowed down so have the competitive salaries.

But the job market for programmers is still a healthy one.

The way the downturn has showed itself is not so much in a shortage of jobs but more a change in the sort of jobs on offer.

Businesses have been forced to tighten belts in every department, and in the computer department this means cutting down on numbers, as it does everywhere else. Instead of recruiting teams of staff with general programming abilities, employers are concentrating on taking programmers with particular skills.

John Haigh, a consultant with AB Executive, a Bristol recruitment agency said: "Our clients are looking for skilled staff with three or four years' experience in particular disciplines."

In his area, he says, employers are after good project leaders and systems analysts with an understanding of production systems for manufacturing.

DP managers are spending their salary budgets on essential co-ordinators and team leaders, so to some extent lower level recruitment is having the hardest time.

The answer for newly qualified programmers is to be flexible in terms of location – there's always a demand for programming staff in the less sought-after parts of the country.

That is, of course, if would-be junior programmers are prepared to be paid slightly under the odds. More experienced programmers, for example, are not anxious to take jobs in places like the West Country where salaries are less than in London or South-east.

So this state of affairs leaves a less competitive job market for first-jobbers.

Employers are also advising programmers to specialise. The direction in which DP is developing – away from big mainframes and towards distributed processing – means that specialisation in functions such as teleprocessing and database design are replacing general programming skills.

In the next few years, say industry watchers, programmers will no longer be distinguished by the machines they know and called IBM or ICL programmers. This may not be enough to get them a job; they will also have to have expertise in a particular computing environment.

The market for contract programmers, according to the contract agencies, is thriving. One might think that if employers are watching the number and quality of staff they employ, they might pick on contract workers as a dispensable luxury.

But instead of seeing contractors as an extra, some employers are using them instead of full-time permanent programming staff.

Using contractors can be an economical way of coping with fluctuations in workload. But one agency manager says that the demand for specialists applies to contract programmers as well as full-time staff.

This supports the agencies' explanation about why employers are still keen to use contractors. Temporary workers are likely to be called for when an installation has a special job underway. It may be converting its system to include TP, for example, or switching hardware completely and in need of a complete systems rewrite.

Some employers are giving programmers contracts for one or two years, says the managing director of another agency.

These employers are probably those who are trying to cover all escape routes by making no long-term financial commitments in terms of recruitment until they see how the economic climate will develop.

So technical specialists are sitting comfortably in the programming market. They are in demand from all sides and have the best choice of jobs. Most employers are advising other programmers to follow their example.

One suggested that programmers should push their DP managers for training if they can persuade employers to let them learn more technical skills their potential job market immediately expands.

Their present employers can hardly complain either. In the not too distant future they may be looking for those skills themselves and will be glad, if they manage to hang on to their staff, to learn that they educated them in advance of their needs.

The Manpower Services Commission appealed last month for opinions from employers and trainees alike on how the much-maligned Tops computer training programme can be improved.

A spokesman for the MSC said it wanted "lots of feedback."

And one of the MSC's priorities at the moment is investigating how more Tops students can be turned into employees.

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Several vacancies for programmers with about 2 years' experience of PL1 exist with a major financial institution. IBM 4300 series machines are installed running under VS1 moving to MVS next year. Knowledge of IMS would be an advantage but is not essential.
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MARKET FOR ANALYSTS

Up-to-date analysts will be in increasing demand

As the use of computers spreads through the professions, the market for analysts remains healthy, says Margaret Park

THE market for systems analysts looks set to be a healthy one for some time.

Analysts are not threatened by new developments such as program generators and operations software.

As long as analysts keep themselves up-to-date with technical advances, their own task is unchanged and increasingly in demand as the use of computers spreads through the professions.

Numbers of systems analysts have moved on from programming, dissatisfied in many cases with their limited role in the business of putting a computer system together.

Analysis can be more varied, connected as it is with systems design and systems development. But there is some disagreement among employers in the industry about what systems analysis actually is.

Most say that their analysts are technical people, usually specialists in a particular brand of hardware or an application, perhaps accountancy systems or databases. As well as visiting clients and analysing their needs, this sort of systems person will also take part in the design and implementation of the final system.

Others, who must be noted because they include big employers such as Computer Analysts and Programmers (CAP), say that their analysts don't concern themselves with the technical aspects of putting a system together and instead are simply business analysts.

Alan Gough, a training manager at CAP, said that for his analysis staff the computer is just a black box.

"They are concerned with organisation and methods," he said. "They think about the movement of paper around an office, and how that process can be computerised."

Gough spoke out against taking on technical staff as systems analysts. "People who move over from programming think more at the user's site about how to implement a system on the computer and not about the user's needs.

"We prefer to feed in people with knowledge of other disciplines, accountancy for example, who will be more user-oriented."

So at companies like CAP, systems analysts are business experts with an eye for management theory and methods of organisation.

But most would-be analysts are more interested in a job which includes making decisions about equipment and software.

About 12,000 analysts worldwide have a qualification in the subject which is administered jointly by the National Computing Centre (NCC) and a sub-group of the British Computer Society known as the Systems Analysis Examinations Board.

The syllabus of the course reflects changes in systems design and fashions in design methodology.

The syllabus is currently under review. Keith Holden of the NCC said: "Proposals have been submitted both from us and from the BCS about how the course material should be updated. We want to introduce more on recently developed technology and systems design techniques.

"Systems design has moved from batch oriented systems to online facilities and more recently on to distributed systems and databases.

HOLDEN. . .NCC draft proposals emphasise methodologies more than ever.

"The NCC's draft proposals emphasise methodologies more than ever," said Holden. "And we want to update the course to include more on networking and data communications."

Holden denied that the trend in systems analysis is away from mainframes. "Although micros and minis are being used more and more in things like local area networks," he said, "analysts aren't in a position to favour one machine above another."

Systems analysts have to keep pace with many controversies about design techniques. Methodologies (that is, techniques of systems design), flood into the UK from the US and interminable discussion about the merits of each are constantly underway.

The NCC did its own survey on the design methods that are being taught and applied in the UK. "We concluded that a lot of jargon was being introduced for the sake of it," said Holden. "One or two seemed to be useful; the Yourdon method for example is one of the most widely used."

The NCC admits that having a qualification in analysis is not important in the job market. About 1,000 students a year take the NCC paper, either at technical colleges or sponsored by employers with companies like Altergo which have commercial training divisions.

But it is uncommon for employers to ask for qualifications from would-be analysts – they are more interested in experience.

Opinion in the industry is that employers will soon make questions about systems methodologies a part of their job selection process. Analysts will be asked which they favour and which they have experience of.

"Analysts are having to re-educate themselves," said one employer. "They will eventually be in trouble if they choose to ignore progress in design techniques."

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University of London Computer Centre

Network and Communications Development

Head of Department

ULCC is designated as a National Computer Centre principally serving the University of London and other Universities in the South of Britain. The Centre employs 140 staff and is currently engaged on a major development programme, including the introduction of a new packet switching network for access to the Amdahl V8 and Cray 1S computers.

The Network and Communications Department is responsible for developing these network systems to conform to nationally agreed standards for universities. The Head of Department can expect to participate in the planning and co-ordination of communications in the national academic community with the objective of allowing users to obtain easy access to computing resources. The Department is also responsible for microprocessor support and candidates should have a knowledge of both hardware and software developments in networking together with relevant recent experience.

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Application forms and further particulars can be obtained from N. Savage, Assistant Secretary, University of London Computer Centre, 20 Guilford Street, London WC1N 1DZ. Telephone No. 01-405 8400, extension 341. Applications should be returned by December 1st, 1982. (1653)

DURHAM UNIVERSITY LIBRARY

SYSTEMS LIBRARIAN

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Further particulars may be obtained from the University Librarian, Durham University Library, Palace Green, Durham DH1 3RN, to whom applications (one copy only) should be sent to arrive by Monday, 22 November, 1982. (1416)

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This strategy is currently based on DEC VAX, HP, PRIME AND CV equipment, and applications in use and under development, range from CAD and Design Analysis to financial, commercial and personnel systems all using on-line data base techniques and disciplines.

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Applicants need at least three/four years' experience in a software support role preferably on a distributed network of mini-computers.

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For these vacancies successful candidates will have a minimum of three/four years' experience; for the Programmers COBOL and Data base experience is required. The Analyst/Programmers will have significant DP experience and a sound programming background, together with a proven record of commercial systems design. They should be flexible enough to tackle the day-to-day problems on commercial systems development.

SYSTEMS PROGRAMMERS
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RECRUITMENT TO TOP JOBS

Demand is now considerably below the level of supply for DPMs and ops managers, reports Alan Simpson

Room at the top is limited for senior DP people

FOR senior DP personnel there is little room at the top. The normal laws of supply and demand have been suspended with demand levels considerably below the level of supply.

Recent surveys suggest that for every senior DP position advertised, 30 or more applicants can be expected, many of whom are highly qualified and experienced. This response compares directly with that generated by programmer or system analyst vacancies where, all too often, only a handful of replies can be anticipated.

Room at the top of the DP industry is noticeably limited, particularly as those who already have possession are reluctant to move over, on, or out of their positions. This pulling-up of the DP job drawbridge is understandable given the general contraction of company operations, budgets and industry job vacancies.

For many companies, it is more a time to batten down hatches than undertake extensive and expensive DP projects. The role of DP and ops managers in such circumstances is to make the best possible use of existing resources and keep within operational budgets.

However the more forward thinking DP executives will use this period of uncertainty to look ahead, or at least round the next IT corner. It is a corner full of technological promise for both individual and company.

Even if the present time is not right for investing and planning for information technology, at least a general awareness of the possibilities is essential.

For many companies, the incorporation of such technology is already a fact of operational life, which will in turn encourage other competitive concerns to follow suit. The selection, introduction, implementation and operation of these new layers of technology will rest largely with the DP manager whose responsibility it will be to interface systems, procedures and, in many cases, company personnel.

> **For many companies it is more a time to batten down hatches than undertake extensive and expensive DP projects**

For DP management then, this is definitely a time for keeping on toes and in touch with emerging industry developments. Rather than resisting the introduction of microcomputers into the organisation, the DP team must become closely involved.

Company user management may relish the idea of gaining processing independence, but it is essential that one individual be responsible for ensuring that the organisation is getting the best possible in terms of suitability, price, support and not least, ongoing servicing.

The micro revolution is having the result of converting many DP and ops managers into information technology managers, a movement welcomed by many industry observers as well as the individuals themselves. Alongside embracing further layers of computing and related technology, DP management are well advised to get more closely involved in the trading objectives and policies of their company.

Ted Cluff, secretary-general of the Institute of Data Processing Management, believes that the DP team owe it to themselves (and presumably their companies) to move away from technology to company management. Without a close familiarity with company operations, the DP team is hampered in recommending the introduction, for example, of word processing or facsimile systems.

"After all", Cluff states, "word processing and allied technology are all computer based and must therefore be assumed to be the responsibility of the DP team."

The IDPM is not alone in believing that there is too much concentration in the DP industry on job titles – *this despite the fact that* senior programmers are often paid more than the ops or DP manager.

The accepted route into DP and operational management has long been that of being in the right place at the right time. The right time could be the period when the company was updating its basic accounting system to a mini or mainframe machine and those already involved moved in line with the configuration.

Another familiar route was that of joining the company as DPM from the sales and marketing teams of the manufacturer. This route, however, is facing something of a change of direction with DP teams often keen to join the suppliers or a leading consultancy group.

In other cases, the DP management team have arrived via the accountancy side of the company and subsequently stayed with the installation.

A further well documentated route to the top has been by promotion through the DP section. This route, which has always been lined with obstacles, has now become more hazardous. Even the DPM finds himself being replaced by professional specialists who are highly competent in such areas as telecommunications, telects or telephony. A knowledge of laser beam technology is of more benefit than close contact with PCM printer and terminal suppliers or company computing procedures.

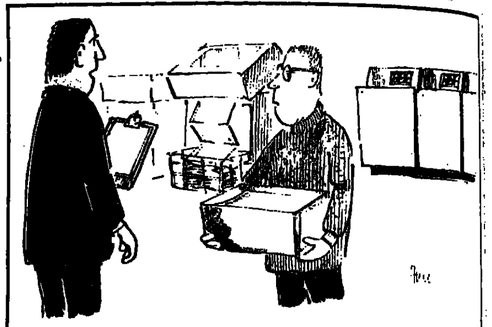
More and more DP executives are turning to career counselling. John Merrifield, who heads the Michael Drayton recruitment organisation in central London, believes it is vital for existing and prospective DP management to plan as far as possible their future careers.

Many companies are looking beyond their immediate requirements and seeking staff who can guide and lead the organisation into new areas of technology. This involves not only machine and man management, but appreciation of the role of trade unions and the many company and employment Acts.

Merrifield emphasises that future IT managers will be all-rounders no less competent in personnel relations than in high technology. Michael Drayton believes that a blanket approach, or response, to senior job appointments should be avoided. Each separate placement or job opportunity should be approached as an independent applica tion.

For the operations manager, the present time is certainly one of challenge and opportunity. New levels of technology are being introduced seemingly weekly, and are cost effective systems.

It is essential therefore for the ops manager to keep in touch and fully informed. With the data processing requirements of companies becoming ever more critical, information has become an essential ingredient of company management decision-making processes. The senior DP job marketplace may currently be limited. But companies reappraise their information processing requirements, a strong demand could emerge. DP management should be ready for the market turn



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* *Circulation ABC January-June 1982 – 100,263*

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DOS/VSE	PROG	DL1	COBOL
DOS/VSE	PROG	TOTAL, ENVIRON	COBOL
DOS/VSE	PROG	TOTAL, MANTIS	COBOL
DOS/VSE	PROG		MARK IV
OS/MVS	SYST PROG		ASSEM
OS/MVS	ANAL PROG		MARK IV
OS/MVS	ANAL/PROG	VSAM, TCAM	COBOL
OS/MVS	ANAL/PROG	IMS/DB/TSO	PL1
OS/MVS	ANAL/PROG	CICS	PL1
OS/MVS	ANAL/PROG	ADF	COBOL OR PL1
OS/MVS	ANAL/PROG	CICS, IMS	PL1 OR COBOL
OS/MVS	ANAL/PROG	± IMS	PL1
OS/MVS	PROG	VM/CMS	COBOL
OS/MVS	ANAL/PROG	CICS	COBOL
OS/MVS	PROGS	IMS	COBOL ± ASSEM
OS/MVS	PROGS	IMS ± CICS	PL1 or COBOL
OS/MVS	TECH CONSLT	IMS	
VMPS	ANAL/PROG	ADRS	APL
SYS 3	ANAL/PROG		COBOL, RPG II
SYS 38	PROG		RPG III
	ANALYST	GEN INSUR	
	ANALYST	LIFE INSUR	

DEC

VMS	PROG		BASIC OR COBOL
AIMS	PROG		

ICL

VME/B	PROG/DES	IDMS	COBOL
VME/B	PROG/DES	TP	COBOL
VME/B	3 PROGS.		COBOL
VME/B	2 ANAL/PROGS		COBOL
VME/B	PROG		S3

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		TRANPRO	COBOL
UNIV EXEC 8	ANAL/PROG	± SYS 2000 DB	COBOL
BURR 6900	PROGS	IMS II	COBOL
BURR	PROG	MED. SYST.	COBOL
DATAPOINT	PROG		DATABUS
HP3000	PROG	IMAGE, VIEW	COBOL
HP3000	ANAL/PROG	IMAGE, QUERY	COBOL
HL8, HL66	PROGS	± IDS, TDS	COBOL
DGMV 6000	ANAL/PROGS	± INFOS	COBOL
INTEL 8086	S/W ENG		ILMAS
INTEL 8086	S/W ENG		CORAL66
MICRO	BUS ANALYST	FOR EUROPE	

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(1497)

Burroughs

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THE MIDLANDS SCENE

Bosses — and staff — are very choosy

Job opportunities in the Midlands and Birmingham are assessed by Chris Thornton

THERE are jobs in Birmingham and the Midlands — but firms are very choosy about who they take on, and computer staff are very choosy about where they go, because most of them prefer to hang on to what they've got in times of recession.

"Users are fussy about the type of skills they want from their staff, whereas two or three years ago they were just glad to be able to get people," said one Midlands recruitment specialist.

"We've had more rejections of job offers recently then ever, which indicates that people don't want to move unless they have a very good reason for doing so, like being offered a lot of money or going to a more interesting job.

"But we've found that firms are no longer prepared to offer the earth to tempt people to move. Employers aren't keen to get involved in auctions for the services of computer staff. They are trying to stagnate the salary market."

The current recession is the reason for the gloom. Birmingham and the West Midlands, with its heavy industrial base, has been particularly badly hit. The recession has hit development budgets as firms have tightened their belts, and very often the first department in a company to be hit is data processing.

Managing directors of companies and their boards of directors may want development work to go ahead, but when they learn from the data processing managers that to continue with a project would mean taking on more staff, they baulk.

And as they often find themselves having to lay off and make people redundant from other sections of their firms, they understandably fight shy of offending unions by sacking people on the one hand and at the same taking on new computer staff with the other.

But things aren't quite as gloomy as they appear. For one thing, there are few experienced computer people on the dole in the West Midlands. The problem is that people aren't moving because they are frightened to do so, and the postponement of potentially exciting new projects means there isn't the work to tempt them.

But the signs are that the market is beginning to stir itself. "There are definite signs that things are starting to happen," said a recruitment specialist. "Six months ago job prospects were abysmal, but now things are getting brighter, and it should continue that way for the next few weeks, at least until we reach the post-Christmas period, which is a traditional time of depression in the job market anyway.

"After Christmas I hope things will get better. And if the government's rumoured autumn mini package, with particular aid to West Midlands industry and new technology is true, then things might improve considerably by next spring."

> **"If people have vacancies they are quite prepared to wait until they find the right person rather than fill the vacancy yesterday"**

Most Midlands recruiters feel there will be an upsurge in the job market once the recession is over.

"It takes a while, though, for the effect of lower interest rates and a decrease in inflation to be felt at the recruitment end," said another specialist. "I think it will be next spring before the job market improves, but things are getting better.

"At the moment there are more opportunities for programmers with average experience. Things are very competitive at project management level. Data processing managers and other senior managers have no chance of getting jobs; and the market for contractors, which is never particularly good in the West Midlands at the best of times, is depressed.

"The only people with genuine grounds for optimism are sales executives, but then there's always a shortage of good salespeople — and there's really no market for operators."

"The market is Doomsville" was the forthright comment of one pessimistic recruiter, but even he admitted that things were improving.

Tops students and trainees are always the ones to suffer in times of recession.

"If you're experienced and obviously talented, there's always likely to be a demand for your skills," was one typical comment from an employer, "because we can always find room for exceptional people. But if we're taking on people then we want staff who can produce the goods immediately. And trainees aren't likely to do that."

"If people have vacancies," said another Midland recruitment agency, "they are quite prepared to wait until they find the right person rather than fill the vacancy yesterday. They think they are saving money that way — although in the long term that may not necessarily be true — but in times of belt tightening and cutbacks it makes sense for them not to have to pay a salary for a month or so."

Over in the East Midlands — Leicestershire, Nottinghamshire and Northamptonshire — the picture is brighter, but not by much, and only because industries are more diverse in the East Midlands. It is the heavy manufacturing industry of the West that has been hit worst by recession.

On the bright side, there are always new users appearing (people still buy computers, even in recessions) and that means new opportunities for both temporary and permanent staff. An exceptional agency sometimes reports it has "a lot of activity". But they are very much the exception.

Overall, Midland agencies report a feeling of optimism and can "see light at the end of the tunnel". But a lot of Midlanders' hopes are pinned on an autumn package from Mrs Thatcher.

Few experienced computer people are on the skiddle in the West Midlands

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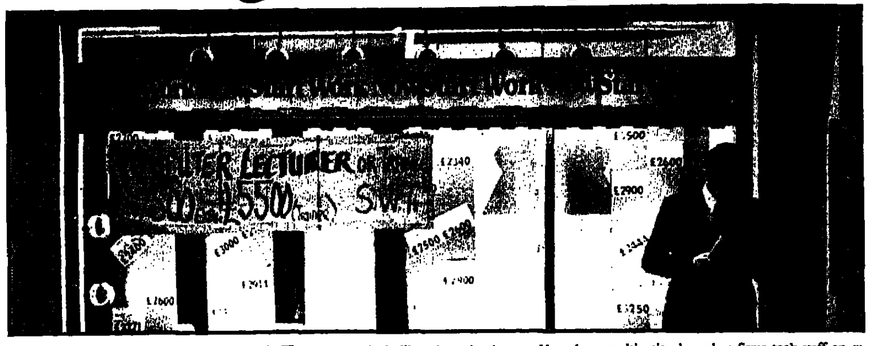
WEST COUNTRY RECRUITMENT

Chris Thornton looks at an area where 'opportunities for work are superb if you are prepared to put yourself out'

Bristol back in first division — as a high technology centre



WHILE Bristol City football club has dropped from first division to the foot of the fourth in three spectacularly disastrous seasons, Bristol and its surrounding west country has been transformed from a high technology backwater into a first division outfit.

For in recent years Bristol and the West have enjoyed a good deal of success in attracting high technology companies for the area, joining a long tradition of established advanced engineering outfits like Rolls-Royce, British Aerospace and Westland Helicopters.

This tradition has resulted in a pool of skilled labour, and the output from the area's universities and polytechnics has supplemented that pool.

In addition, Bristol has always been a financial and commercial centre, has beautiful surroundings, and with the advent of high speed trains and the opening of motorways like the M4 and M5, has become a communications centre, with easy access to South Wales, the Midlands, the Thames Valley, and the rest of the South-west region.

All those advantages have lured high technology companies to the region. There's Logica in Swindon, Marconi, Sperry Gyroscope, Fairchild and Hewlett-Packard in Bristol, while Philips Business Systems plans to open its headquarters in Swindon in two or three years.

"Opportunities for work are superb if you are prepared to put yourself out," says one recruitment specialist working in the area. "Swindon and Bristol are growth areas, with a lot of companies moving to the area, and there have always been insurance and finance companies like Hambro's, Eagle Star and Sun Life."

Add to that list Phoenix Assurance, Clerical, Medical and General, Trident, Mercantile and General, Lowndes-Lambert and National Employers Mutual, all of which have offices in the Bristol/Gloucester/Cheltenham/Swindon area, and just think of how reliant commercial and financial companies are on their computers, and you have an idea of the scope for employment in the West.

Yet Wales and the West Country have long appealed for the scenery and as places to spend holidays rather than as places to hit the big time in terms of career prospects.

This is partly because of low salaries. There are usually plenty of vacancies in places like Somerset and Cornwall but they are not filled because salaries are below what programmers and computer staff have come to expect from other areas.

But salaries in the growth areas around Bristol/Swindon/Bath are catching up on and rivalling those in the South-east.

"Employers in Britain's Silicon Valley – as the West is known – automatically pay good salaries to attract the right sort of people," says one recruitment specialist.

And Keith Gay, associate director of AB Executive of Bristol, says that whereas once salaries in the West were below the South-east and other parts of the country, this is no longer the case – and he says he has one software vacancy on his books at the moment paying a salary of £20,000.

Many large multinational companies with big management service departments, like Burmah Castrol, have their headquarters in the West. "It's an attractive area, which is why it draws companies," says Mike Beasley, of Sanderson Recruitment. "Companies move from London to cut costs, but communications are good, the pace of life is slower, salaries are as good as in London, and the countryside is attractive.

"But you have to be good to work here. Standards seem to have risen over the last year or so, and the days when firms took staff on en masse seem to have almost disappeared.

"Nowadays companies look for experienced, talented staff, and will probably find room somewhere for a high calibre person.

"Our clients are looking for skilled staff with at least three or four years' experience in particular disciplines," says John Haigh, of AB Executive. "Good project leaders are in demand, so are systems analysts with knowledge of production systems for manufacturing."

Most opportunities in the West are with users. There are some bureaux and software houses, but their involvement in the region is patchy, consisting largely of small companies specialising in the scientific market, a particular range of hardware, or the micro product scene.

The Welsh job picture is not so bright, unfortunately, although the Welsh Development Authority has done its bit by attracting GEC, Sony and Hitachi.

"There's work if you look for it," says the ever-optimistic Mike Beasley, of Sanderson.

Wales and the West could be the answer to newly qualified staff who can't get jobs, or for experienced, talented staff who want those incentive, well-paid jobs they don't seem to be able to get in their current location, or for people who are fed up with the hustle and bustle and grime of city life.

"We've got 400 staff on our books at our Cheltenham branch," says Rose Francetta, proprietor of Alpha Computer Recruitment, "and 50 registered vacancies which we're having to advertise because those 400 are holding out for the top salaries."

Gay says there are certainly a lot of vacancies in the area. "But the problem is recruiting experienced, talented staff."

While pockets of the west country may lag behind in salaries, the message for the region as a whole is clear – commerce is on the up and up. You may not be able to watch first division football there any more, but if you're a good programmer, you'll almost certainly end up with a good job.

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Ref: L/45/A

Strategic Consultancy
Greater London : Pkg to £19K

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Ref: L/45/B

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Netherlands : Salary to £15K

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Ref: L/45/C

Pascal/UNIX
E. Midlands : Salaries to £9K

One of the UK's leading microprocessor consultancies, renowned for its range of products based around the UNIX operating system, is currently seeking a number of **Programmers** and **Analyst Programmers** to be based at its East Midlands development facility. Suitable applicants should preferably hold a numerate degree and have programmed for a minimum of two years in either PASCAL or 'C' on any leading 16- or 32-bit processor. Ideally, you will have some knowledge of the UNIX operating system, but this is not essential since training will be provided. Working as a member of a small project team you will be involved in various applications including Local Area Networks, Office Information Technology and Graphics.
Ref: L/45/D

Comms Consultants
Inner London : Salaries to £20K + Car

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Ref: L/45/F

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London & H. Counties : Salaries to £7.5K

A number of exciting opportunities have arisen in London and the Home Counties for **Programmers** who have recently graduated. You should hold a first or second class honours degree in Mathematics, Computer Science or Electronic Engineering. Of particular interest will be applicants who have completed a sandwich course and can offer 12 months' industrial training experience. It is essential for all positions that you offer fluency in PASCAL, 'C', ADA or Assembler. Ideally your project work should have included compiler writing, artificial intelligence, UNIX or firmware development.
Ref: L/45/G

Process Control Software
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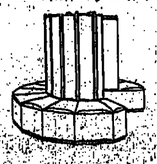

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IRISH RECRUITMENT SCENE

Despite the influx of foreign computer expertise, this has not really rubbed off on the Irish, says Della Bradshaw

Eire woos foreign electronics manufacturers to create jobs

UNEMPLOYMENT is a nasty word everywhere these days, but in Ireland particularly so. In the Republic unemployment stands at around 13.5% and in the North it borders 20%.

With computers held up as the scapegoat for many of the problems in the UK it seems rather strange that computer and electronics manufacturers are being wooed across the seas as job producers.

The most vociferous proponent of Ireland has always been the Irish Industrial Development Authority (IDA). It has an arm-long list of the virtues of setting up your computer company in the Republic: Capital grants of up to 60%, training grants of up to 100% and corporate tax rates of as little as 7.8%, not to mention a workforce that barely knows the meaning of trade unions or strikes.

The IDA has had its successes. Foreign companies presently employ about 34% of the workforce, and in computer terms that means the big name American companies like DEC, Amdahl and Wang, which has recently announced plans to increase its workforce from 300 to 1,000, and Japanese manufacturers like Fujitsu, NEC and Sord, which is planning to set up its European research and development centre in Dublin.

But the IDA has also come under fire recently from the government-commissioned report produced by Telesis, a US consultancy. The IDA spends about 11% of the Republic's capital budget, which Telesis says is too much.

The IDA in retaliation can point to its track record in the electronics field. US firms re-invest nearly three-quarters of their profits in Ireland, and although the incentives offered by the IDA are for set-up industries, which in the past has encouraged companies to take the money and run, this has not happened so far with the new breed of electronics and computer manufacturers.

> **The last time we advertised there was a big response from English people who wanted to go over to Ireland**

But will all this reinvestment help Ireland out of its economic difficulties?

In spite of the influx of foreign computer expertise, this expertise has not really rubbed off on the Irish. There is only one home-grown Irish microcomputer manufacturer, Transtec, which employs 30 people at the moment and hopes to increase that to 50 within the year – which makes the company's aspirations "to become as big as Apple" look pretty bleak. Nor will an extra 20 people make much of a dent in the 180,000 or so who will be out of work in Ireland by Christmas.

On the software front Ireland is moving somewhat faster. There are now about 150 companies in Ireland involved in software production, about 40 of which have been established this year. About 20% of these are attached to the big foreign companies like DEC and Wang, which leaves about 120 smaller software houses, like Information Desk Software in Dublin.

IDS specialises in applications for vertical markets like insurance broking and pub stock control, but Patrick O'Sullivan, the managing director, believes one of the big areas where people are needed is in training. "We've just set up a separate training department which is running courses on CP/M and financial spreadsheets for new users and people who are thinking of buying a computer," says O'Sullivan. "Another area is support – a lot of people are needed in that area."

There have been quite a lot of "foreign" software houses setting up in Ireland as well, particularly from the US and the UK. It's not the small companies either: Micropro and CACI are two of the American companies, and Computer Ancillaries and Altergo are from the UK.

Altergo set up in Dublin in 1975 because "there was an oversupply of good-quality graduates there and very favourable incentives to create a company," according to Dick Jones, managing director of Altergo in the UK.

One thing the IDA keeps going on about is the range of training facilities for young people wanting to go into computers and electronics. And you have to admit it does put the UK to shame. At the tertiary level there is the microelectronics centre in Cork, which concentrates on things like gallium arsenide and Josephson junctions. There is also Anco, similar to the Tops scheme – and secondary schools overflowing with Apples.

But whether this is going to cut back unemployment is questionable. The jobs are there at the moment, but are they being taken by the Irish? According to the IDA only about 2% of DP employees are non-Irish, and many of those are the big wigs at the top of the international companies.

But people like Edmund Howard, who co-ordinates advertising for Irish firms in the UK, think there is a trend towards the employment of British people at what Howard calls the "top end" of the market.

"There are increasing opportunities in Ireland in all areas," he claims, "especially for IBM System 34 and 38 people and on the IMS software side. There are also demands for people in consultancy and for project leaders. The last time we advertised there was a big response from English people who wanted to go over to Ireland."

There are also a lot of people returning to Ireland, after 10 or 20 years abroad, who are taking up high level and specialised jobs in the DP and electronics industries.

With half the population of Ireland under the age of 25 the Republic's workforce could increase by nearly 20% in the next nine years. On top of that there are fewer women employed in Ireland than any other EEC country, so if they decide to imitate their European counterparts it could push that figure up even further.

In Northern Ireland the prospects are even bleaker. The Northern Ireland Development Board, which replaced the Northern Ireland Industrial Development Authority in September, admits that over the past year no new European or American computer or electronics firms or software houses have set up in Ulster despite the massive advertising campaigns and claims of a "new Silicon Valley" in the North. Nor could the NIDB come up with any home-grown companies set up in that period either.

Frank Metcalf of Software Ireland, which started in Belfast in 1979, paints the same bleak picture. "The situation here is very difficult indeed, from the employees' viewpoint. As employers we have no difficulty at all in getting staff, and getting very good people from Queen's University or the polytechnic.

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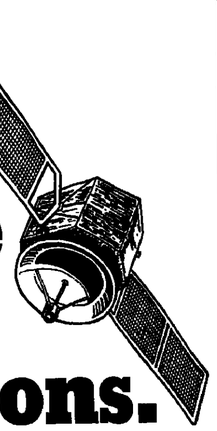

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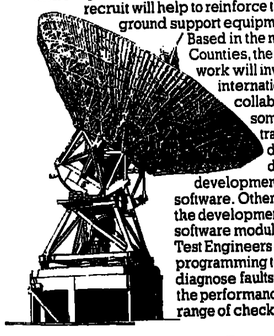

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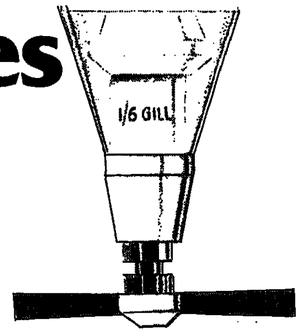

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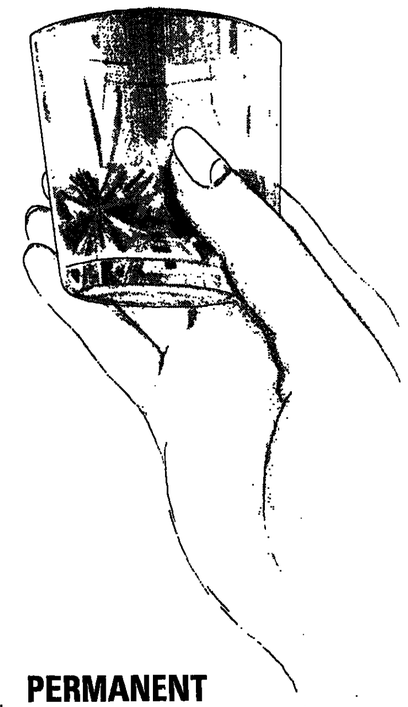

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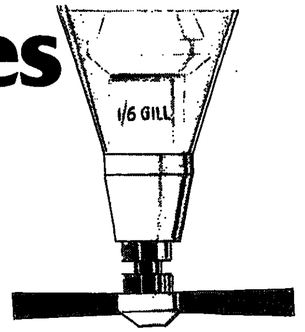

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VAX SYSTEL expertise
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Contact: STEVE WHITING, STEVE CASEY, KEITH TAYLOR, PETER HOLLIDAY, CHRIS WHETHERLY, DAVE LONGHURST, DEREK WADHAM or SANDRA CAREY

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Quote reference W638-IM.

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For further information telephone Brighton 606755, extension 25.

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SALES BIT

Quality of Management — 30

How to avoid being a pig in the middle

A FEW days ago I was having lunch with the managing director of one of the major computer manufacturers (no, he paid!). Among other things, he mentioned his displeasure at the insatiable appetite of the "corporate tigers" on the other side of the Atlantic for more and more information and the increasing complexity of detail and presentation of the data being demanded.

Yet he was being confronted by increasing reluctance from his own subordinates to provide any information at all for a variety of reasons ranging from apathy to belligerence.

This was becoming a problem, because much of the information was required for onward transmission to his peers. And he was becoming increasingly out of touch with what was actually happening in the company he controls.

Being a pig-in-the-middle is very common in management, and those in district-/area/regional sales management are particularly susceptible to it. On the one hand, the national sales manager is (quite rightly) anxious to know what is happening in the field. Are there opportunities to be exploited or problems to be resolved that need his involvement? Are things going as well or as badly as he believes?

On the other hand, there is flak coming up from territory salespeople, usually in the form of "I've been too busy to write any call reports", or "I don't really see the need", usually in volumes inversely proportionate to sales achievement.

It is a frustrating and potentially destructive sandwich that can ultimately result in the very opposite of what an effective reporting system is designed to achieve.

Resolving this kind of problem although not easy, is not impossible. There is only one starting point and that is the process of putting one's own house in order — ensuring that the reporting system between one's subordinates and oneself is effective.

That means it must be brief, relevant and prompt, and interactive. Verbosity, irrelevance and tardiness are a severe malady for any reporting system, but a total lack of response to one's reporting endeavours, like posting letters in a dustbin, brings sure and certain death.

In other words, people who make out call reports need to know they are not wasting their time. Okay, they have much to benefit themselves from the maintenance of selling records, but they need to know their boss really cares and can be called upon in times of trouble or triumph.

From the sales manager's point of view, it is extremely unlikely that he can afford the luxury of responding formally to every call report he receives, but he must make a point of replying to every document that contributes valuable facts.

To merely accept without as much as an acknowledgment, is to imply disinterest or that the information concerned is of no value. Either suggestion can only result in the demotivation of the sender. The easiest way is to make a note on the call report concerned and return it, or a copy of it, to the sender.

"Thanks for the information. Please let me know if you need any help from me, or technical support".

"Looks bad. Can we get together some time on Friday and discuss it?"

"Congratulations! We've been trying to close this account for ages. Everyone here is chuffed. Well done".

Such messages not only mean what they say, but also infer that such information is valuable and appreciated, and more to the point, read by the recipient.

Having established an efficient reporting system between one's subordinates and oneself, then is the time to involve one's peers. This does not mean you wish to put into effect the same system, but rather an appropriate mechanism which has the same qualities of relevance, speed, brevity and interaction.

However, the chances are your peers will commend the efficiency of communications between your troops and yourself, while at the same time insisting that you tow the corporate line, if only because that's the way it's always been done.

On the other hand, they might just take a deep interest in your methods and create a new management reporting system based on your ideas. The problem is, could you cope with the shock?

Alan Williams

COURSES

■ WOMEN with management potential may benefit from a women-only course to be held by the City University Business School in February next year. Managerial Effectiveness for Women includes two weeks of full-time study with an optional follow-up workshop. The accent is on personal development and career planning. Suitable applicants are likely to be between 30 and 40, earning £10,000 plus, and at management or equivalent technical levels. Candidates will have been identified by their companies as having real management potential. The course will be held in London, and the fee is £1,200. Details from Jan Leeming on 01-444 5955.

■ THE Coventry (Lanchester) Polytechnic has two microcomputer courses lined up for early next year. On January 4-5, a workshop entitled Engineering Applications of Microcomputers is intended for engineers and technicians of any discipline who have an interest in the application of micros to sequence control, closed-loop control, measurement and data logging. The Microcomputer Workshop, scheduled for January 6-7, is intended for those who have little or no knowledge of microcomputer systems. Details from Carolyn Hall on (0203) 24166 ext 7606.